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September-October, 1969

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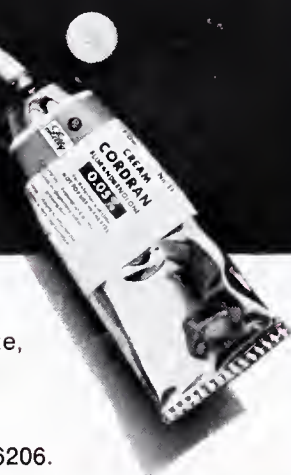
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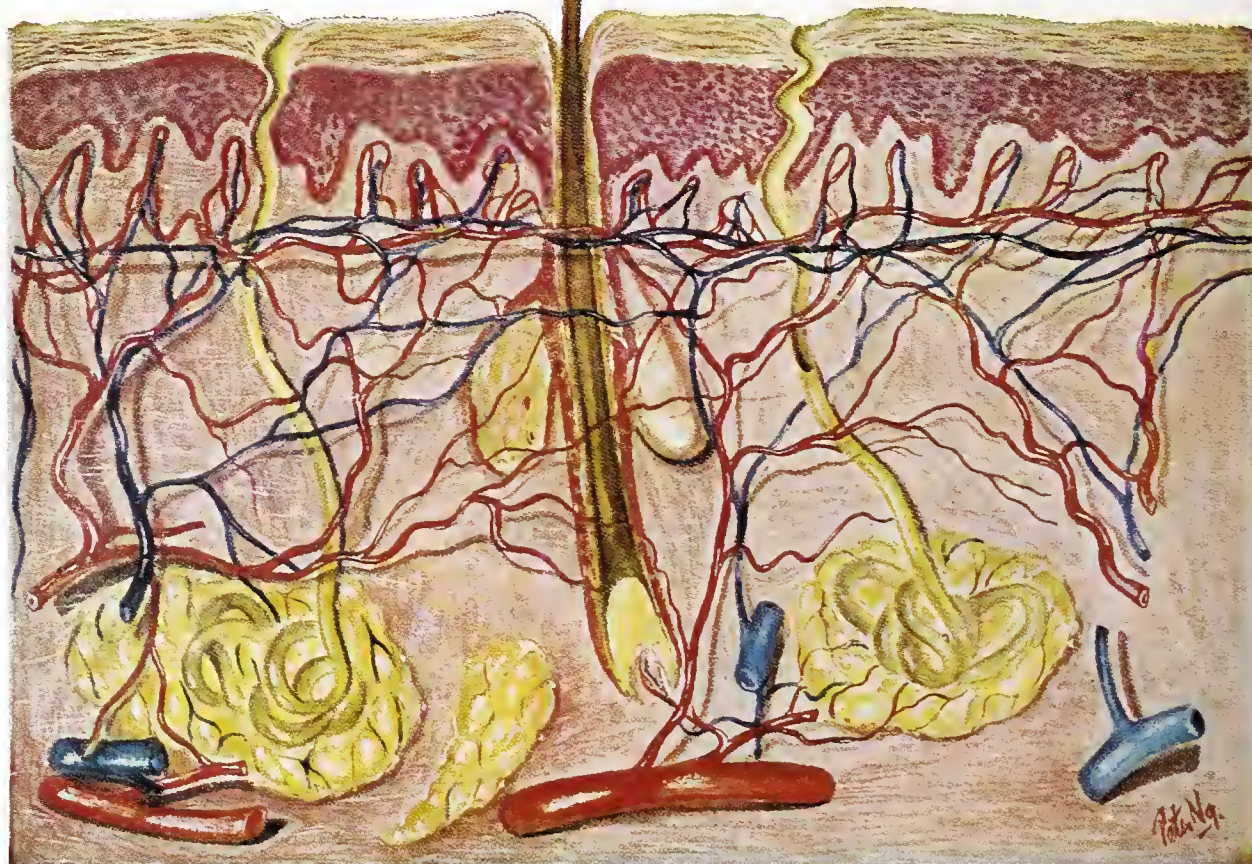
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— editorial**

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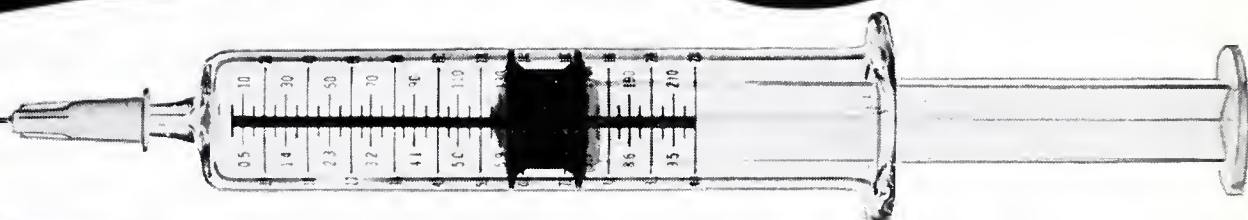


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Correspondence

Thrombosis in the Skies

TO THE EDITOR:

Dr. Jones's "slant and angle" on thrombosis following air travel raises the question of whether any apparent increase in thrombosis among women taking the Pill is correlated with their freedom to fly the friendly skies instead of changing diapers.

LOUISE S. CHILDS, M.D., *Chief*
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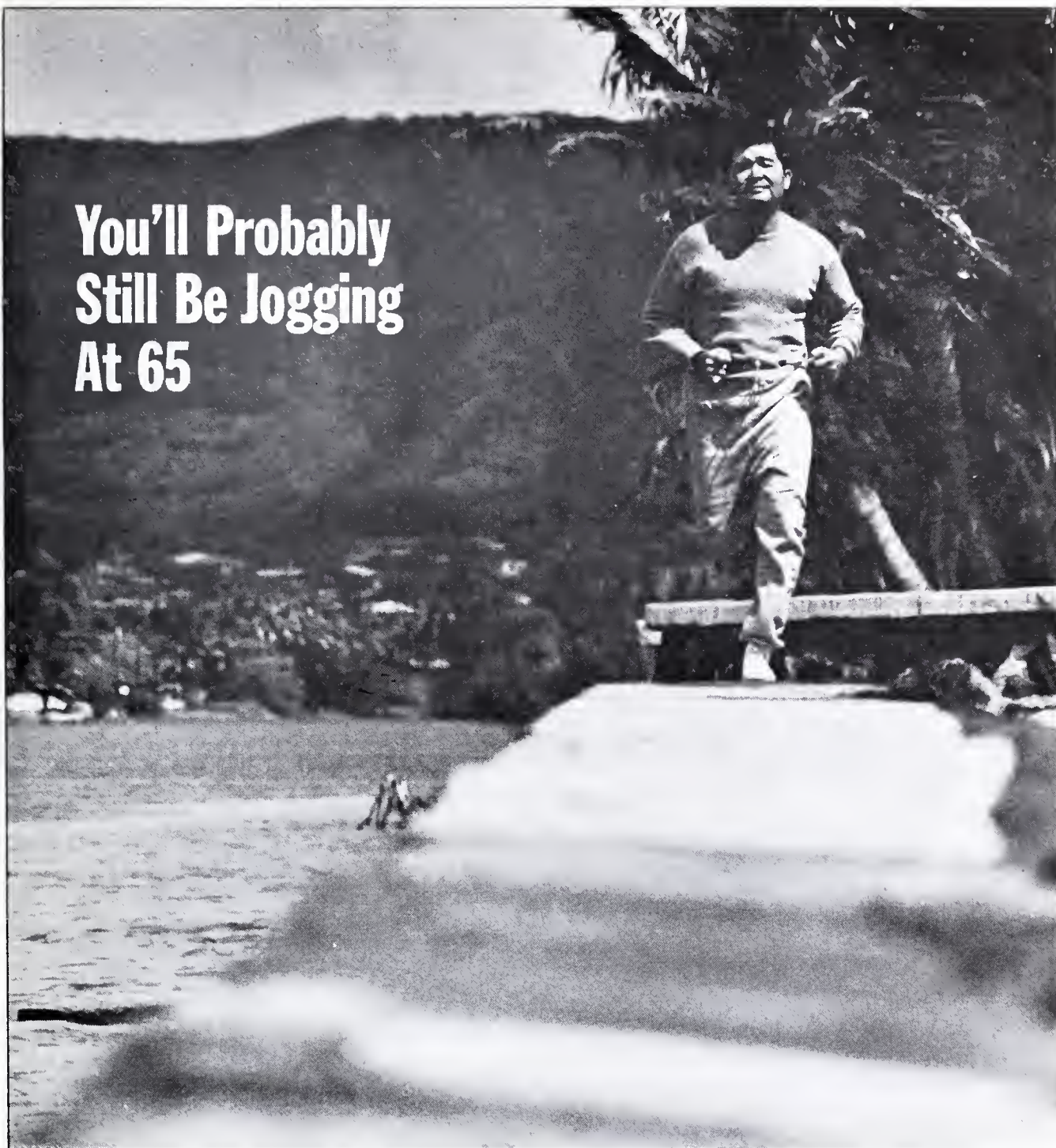
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Mandelamine reduced recurrences in adult males³

The interim results of a continuing study in seven U. S. Public Health Service hospitals demonstrate that long-term treatment with urine sterilizing agents can control recurrence of bacteriuria in adult males. However, long-term therapy was only effective if initial sterilization of the urine was achieved with broad-spectrum antibiotic therapy.

In this study such antibiotic therapy eradicated bacteriuria in 88 percent of 122 patients. Then each of these 107 patients was placed randomly in one of four groups. After 13 months the recurrence of bacteriuria rates was 86% for the placebo group, 46% for the nitrofurantoin group, 43% for the sulfamethizole group and 22% for the methenamine mandelate (Mandelamine) group*.

*In this group, the greater interim use of antibiotics for incidental infections, and minor variations in distribution of patients as to adverse host factors, may have contributed to the better response.

Mandelamine has also been shown to reduce recurrences in children⁴ and to be of value in the treatment of bacteriuria associated with chronic infections.⁵

Mandelamine— a logical choice

There has been increasing interest in the use of long-term suppressive therapy, although the benefits are not yet fully established. In each case, the physician must decide, based on the history of recurrences, whether he wishes to institute long-term bacteriuria control. When the decision is made to utilize such therapy, Mandelamine is a logical choice.

When utilized immediately after antibiotic therapy, Mandelamine, in conjunction with a urinary acidifier (if necessary) is a useful agent in preventing recurrences of bacteriuria. Through its local action in the urine, Mandelamine exerts its antibacterial effect against a wide range of gram-negative and gram-positive pathogens. Unlike sulfonamides and antibiotics, it does not foster development of bacterial resistance. And Mandelamine offers the safety margin and economy so important in long-term use.

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1. *Mod. Med.*, 34:109 (April 11) 1966. 2. *The Kidney*, ed. 3, Boston, Little, Brown & Co., 1967, pp. 286-291. 3. *Ann. Int. Med.* 69:655 (Oct.) 1968. 4. *Am. J. Dis. Child.* 105:560 (June) 1963. 5. *Hosp. Med.* 4:73 (May) 1968.

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Precautions: Dysuria may occur (usually at higher than recommended dosage). This can be controlled by reducing the dosage and/or acidification.

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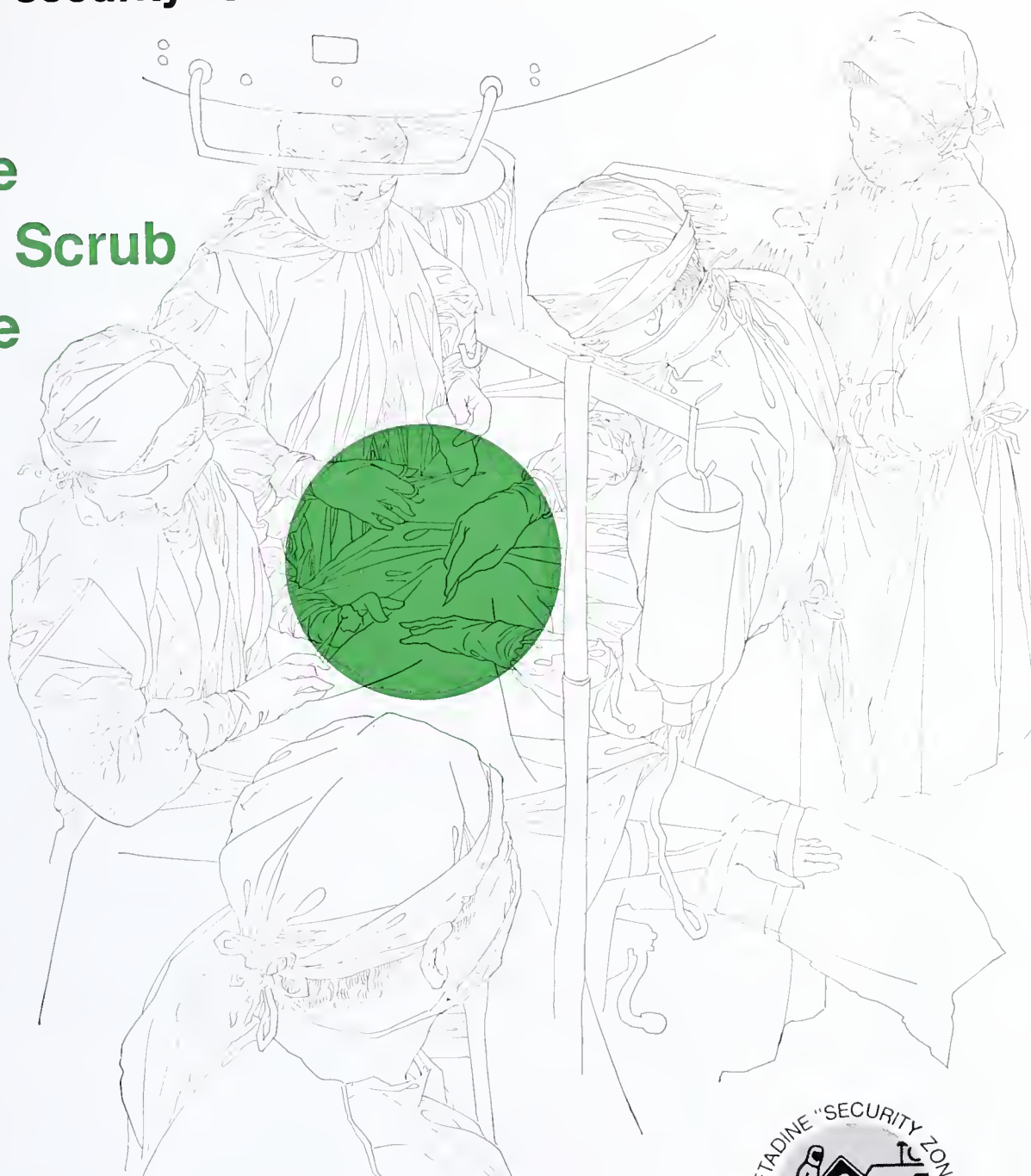
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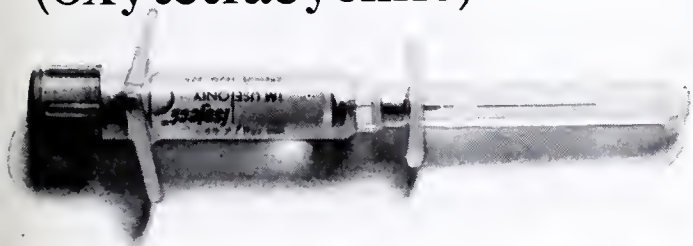
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The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Increased intracranial pressure with bulging fontanelles has been observed occasionally in infants receiving therapeutic doses of the drug, but such signs and symptoms have disappeared rapidly on cessation of treatment with no sequelae.

Adverse Reactions: Subcutaneous and fat-layer injection may produce mild pain and induration which may be relieved by an ice pack. Very mild gastrointestinal disturbances, not requiring discontinuance of the drug, may occur occasionally. Allergic reactions, including anaphylaxis, rarely have been observed.

Dosage: **Adult:** The optimal dosage varies, depending on the type and severity of infection. Unless otherwise specified, a dose of 100 mg. every 8 to 12 hours, or a single daily dose of 250 mg. should be adequate for the treatment of most mild or moderately severe infections. In severe infections, 100 mg. every 6 to 8 hours, or 250 mg. every 12 hours may be necessary.

Serum levels obtained by the recommended dosages are comparable to those provided by the oral dosage of 1 to 2 Gm. daily in adults. Antibiotic therapy should be continued for at least 24 to 48 hours after all symptoms and fever have subsided.

In certain diseases specific courses of therapy may be recommended as a general guide. In primary and secondary syphilis for example, the daily administration of 2 Gm. oxytetracycline, orally, in divided doses for two weeks has given good results. In cases of gonococcal infection two intramuscular injections of 250 mg. each, or one intramuscular injection of 250 mg. combined with one gram given orally as a single dose, will usually suffice, but repetition of this therapy will be required in an occasional case.

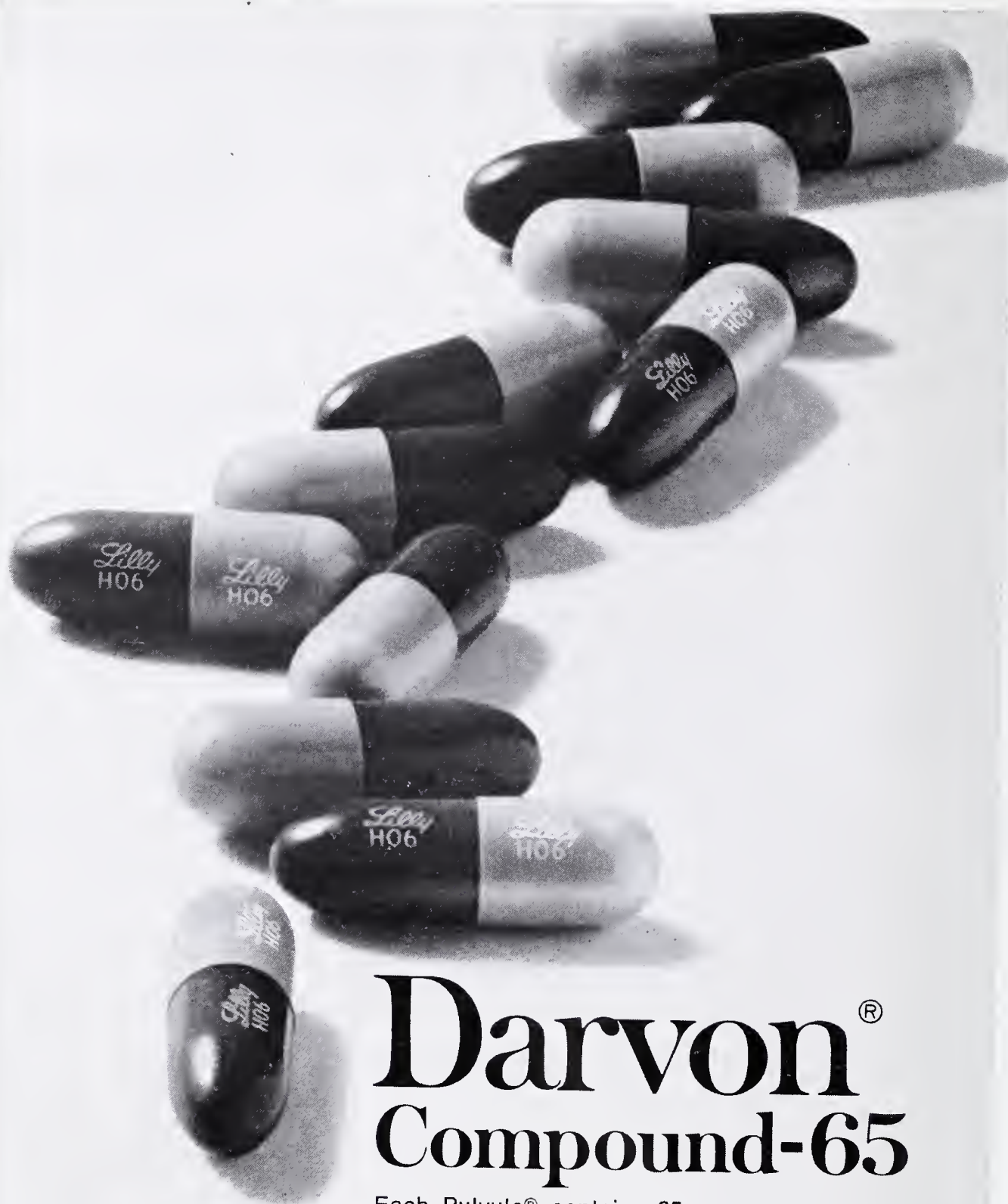
In the treatment of hemolytic streptococcal infections, therapy should continue for at least 10 days to prevent development of rheumatic fever or glomerulonephritis. In the treatment of staphylococcal infections indicated surgical procedures should be carried out in all cases.

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REPORT

National Conference on Breast Cancer Washington, D.C., May 8-10, 1969

CLARE SPRAGUE, M.D.,* *Honolulu*

GROWING out of the seventh annual seminar on early detection of breast cancer (1968) and through the efforts and interests of the American Cancer Society and United States Public Health Service's Cancer Control Program, the first national conference on breast cancer was held in Washington, D.C., May 8, 9, 10, 1969. There was an attendance of over 800 physicians of various specialties and interests. The speakers represented all of the specialties and areas of research which may be expected to lead to important advances in pathogenesis, diagnosis, therapy, and ultimate control.

The purpose of the conference as expressed by Wendell G. Scott, M.D., the chairman of the conference program committee, was to stimulate national interest in this extremely serious and common disease. He started the proceedings on a hopeful note stating that never has national attention been focused on a disease without the answers being obtained in a reasonably short period of time.

Breast carcinoma was characterized as the most uncontrolled cancer in the United States today, responsible for the most deaths, the greatest economic losses, the most diagnostic measures, the most biopsies, the largest number of radical operations, the most x-ray therapy, and the most

hormonal therapy of any neoplastic disease. Despite some recent advances, primarily in the early diagnosis of breast cancer, the over-all mortality rate has remained approximately the same for many years. Although some improvements have occurred in the five- and ten-year survival statistics over the past twenty years, this improvement has been offset by a gradual increase in incidence in the premenopausal age group. Probably because of the acknowledged lack of any dramatic improvement in survival statistics from currently practiced modes of diagnosis and therapy, most speakers and discussants were not dogmatic in their views.

Most of the papers presented will be published shortly in *Cancer*, so that it is unnecessary to survey all of them at this time. I will instead summarize some of the latest thoughts on pathogenesis, diagnosis, and treatment.

ETIOLOGY

First of all, what are the etiologic factors in the development of breast cancer? These are largely unknown at present. There is epidemiologic evidence that significant differences exist in different racial or national groups. Of great interest to physicians practicing in Hawaii, and as a result of the repeated reference to comparative incidence figures by several speakers, of great interest nationally, is the significantly lower incidence of breast cancer in Japanese women. The

* Pathologist and director of laboratory, Kapiolani Maternity and Gynecological Hospital.

Received for publication September 2, 1969.

incidence in Japan is reported to be approximately 25 per cent of that in the United States. The most striking difference is seen after the age of 45. American women of Japanese ancestry living in Hawaii were said to have an incidence between that of Japan and of the continental United States. Other possible etiologic leads are the experimental evidence of breast carcinogenicity of estrogenic hormones in other mammals (rats, mice, hamsters, rabbits, dogs), the reduced incidence of carcinoma of the breast in the United States in women castrated prior to 40 years of age (25 per cent of the incidence in noncastrated women), the apparently reduced incidence in multiparous women with lower incidence noted in those who have had their first babies at the youngest age, the strong familial or genetic effects with high incidence in daughters of known cases, and the higher incidence in Jewish women.

One speaker made the following statement, "Carcinoma of the breast is preventable." He stated that the variations in incidence and experimental evidence suggest that there is "a causative agent." He suggested that estradiol or some other estrogenic compound may be "the causative agent." He answered the question posed concerning high estrogen levels during pregnancy by stating that the estrogen of pregnancy, estriol, may counteract the effects of other estrogens and in itself is not carcinogenic (in laboratory animals). He stated that the time of optimal risk of induction may coincide with puberty. However, there was no general agreement on this seemingly oversimplified view of etiology.

Another epidemiologist cited most of the same statistics but said that he did not regard some of them as significant differences: for example, the age of first pregnancy. He questioned on a theoretical basis the long latent period required by the single-carcinogen hypothesis for the induction of breast carcinoma. He went on to cite the low incidence of carcinoma of the colon in Japan, the greater relative increase in incidence of carcinoma of the colon in Hawaii Japanese than that of breast carcinoma in Hawaii Japanese, the lower incidence of atherosclerotic diseases in Japan and the intermediate figure in Hawaii Japanese, and the higher incidence of breast carcinoma in the higher socioeconomic groups in Japan. These factors could be related, he suggested, by differences in the dietary intake of fat or other dietary factors. It was stated that the measured amount of breast fat differs greatly between Japanese and Caucasian women, but that the amount of glandular tissue is estimated to be nearly the same, and thus he did not believe the difference in incidence could be explained on the basis of differences in quantity of "tissue at risk."

Papers dealing with experimental carcinogenesis with estrogens, virologic studies of milk in cases of carcinoma of the breast in mice and humans, premalignant lesions in mice and humans, and electromicrographic studies were presented. There appear to be virus-like bodies in the milk of women with breast carcinoma which closely resemble the viral particles in mouse mammary cancer. William F. Feller, M.D., of Georgetown University School of Medicine, asked for milk from pregnant women with carcinoma of the breast. He said that if such patients were known to physicians attending the conference, he would be interested in obtaining milk for his studies and would provide the necessary equipment and instructions for the collection and transportation of the milk to his laboratory.

Of great current interest, in view of the experimental evidence of estrogen carcinogenicity and epidemiologic evidence appearing to correlate ovarian function with breast carcinoma incidence, is the possible effect of exogenous hormones. Currently available evidence is insufficient.

Postmenopausal women receiving continuous exogenous estrogen for many years have not shown a striking increase in breast cancer incidence. Isolated cases of breast carcinoma developing in male intersexuals treated with estrogen, and in a 14-year-old girl following two years of birth control medication, have been reported. In view of the period of latency in experimental carcinogenesis (at least ten years), it is expected that within the next five years the incidence of breast carcinoma will increase dramatically if birth control medication is carcinogenic to any important degree. It is estimated that 10 million women in the United States are now taking birth control pills, and this represents a large-scale human experiment.

It was suggested that the period of greatest risk for the induction of breast carcinoma may be at puberty or shortly thereafter. Thus the absence of evidence of estrogenic influence in the postmenopausal group is thought not to be crucial evidence against the possible carcinogenic potential of estrogen. Roy Hertz, M.D., Ph.D., chief of the reproductive research branch in the National Institute of Child Health and Human Development, gave a well-balanced review of the potential but unknown hazards of birth control pills and ended with a guarded warning concerning their use. Others were less worried about the possibility of carcinogenic potential of these drugs, and did not think that the hazards were enough to warrant any major modification in their use. *However, use of any estrogen-containing drug in women with a prior history of breast carcinoma, atypical or possibly premalignant types of hyper-*

plasia as demonstrated by biopsy, or a strong familial history of breast carcinoma (such as daughters of known cases) was discouraged.

EARLY DIAGNOSIS

The benefits of early diagnosis were discussed. That over 75 per cent of breast cancers are first detected by the patient may indicate the relative effectiveness of self-examination. No one seemed to believe in "biologic predeterminism." The pathologic studies relating size and type of cancer to metastatic behavior and survival were well described. All agree that early diagnosis is indeed most important. Mammography was discussed as a diagnostic aid and as a screening device. There was agreement that it is useful as an adjunct to diagnosis but its applicability as a screening device was questioned. Other diagnostic measures such as thermography and xeroradiography were discussed and the results presented. The projected xeroradiograms were extremely impressive, showing very fine detail clearly in breasts of any size. This promises to be an important contribution to diagnostic accuracy. One very important caution or warning was made concerning mammography: *a negative mammogram means nothing*. Reliance on mammography alone is discouraged; it was pointed out that in some cases, mammography has led to a delay in therapy even when a mass was palpable. If mammography alone is used, approximately 40 per cent of the cases will be missed. As an adjunct to diagnosis and as a screening measure in combination with physical examinations, it was thought to be helpful. Because of the technical problems and need for a radiologist trained in mammography, it was thought that mass screening with mammography is not likely to be practical. Better screening devices, preferably operated by trained technologists, are the goal of screening developments.

TREATMENT

Comparison of various modes of therapy such as radical mastectomy, modified radical mastectomy, simple mastectomy, and radiation therapy are not now available in any large well-controlled series in the United States. Proponents of these individual

modes and combined modes of therapy presented their reports and experiences. It was apparent that a carefully controlled series undertaken in each institution, in which the same treatment team is used for each technique, is needed in the United States. It is not possible to compare work in one institution with that in another: this presents too many variables.

The ultimate goal of therapy was expressed as being nonsurgical but it was felt that this goal is far off. More immediate goals are to determine which currently available mode of therapy gives the best results and least morbidity. Despite the presentation of divergent views, the participants were in general quite willing to admit that all of the answers are not now available.

Proponents of radical mastectomy are loath to give up a well-established and effective therapy for what they believe are not well-proven therapeutic measures. There are, however, many centers, primarily in England, in which modified radical mastectomy appears to give equally good survival rates.

The various types of breast carcinoma and their influence on prognosis and bilaterality were discussed and the approaches to this problem were suggested. Prophylactic mastectomy and concurrent contralateral biopsy were discussed. Some attention was given to radiation and to chemotherapy in initial therapy and more attention was given to these modes of therapy in treatment of advanced disease. Also, a number of papers dealt with ancillary and palliative therapeutic methods.

To a physician practicing in Hawaii, it became very evident that here in Hawaii, we are in a prime position to test some of these hypotheses. A well-designed and properly financed study in which breast cancer incidence, estrogenic fractional levels, other hormonal levels, dietary fat, serum lipid, and objective measurements of degrees of obesity may be studied is indicated. The goal of such a study would be to elucidate the possible effects of hormonal, dietary, and genetic factors.

It is hoped that the conference will, by exposing the enigmas, open the way to more productive basic and clinical research in the near future and thereby provide an opportunity for the control of breast cancer. ■

Here is a practical treatment for psychotic patients, as far from that of Bethlehem and the "snake pit" as can be imagined!

Behavior Modification: a Therapeutic Milieu for Chronic Schizophrenics

WALTER F. WILD, Ph.D., Honolulu

• *A behavior modification approach to the management of chronic psychoses in inpatients has proved highly successful in practice. It consists basically of systematically rewarding desirable behavior and systematically extinguishing—by withholding such rewards—undesirable behavior.*

BEHAVIOR modification as a form of therapy has been gaining wide attention in the last few years. In general the term "behavior therapy" refers to treatment techniques "derived from theories of learning and aimed at the direct modification of one or more problem behaviors rather than at effecting more general and less observable personality or adjustment changes."¹ That these techniques are applicable to severely disturbed patients in psychiatric hospital settings has been shown most dramatically by several experimenters.² The present article reports a further demonstration of the effectiveness of these techniques to hospitalized patients in Hawaii.

The focus on changing discrete observable problem behaviors is capable of being adopted for therapeutic use on at least two levels. It may be used to alleviate certain disruptive behaviors which divert a disproportionate amount of staff time from primary therapeutic functions. Alternatively, one may construe the patient's hospitalization as the product of a nexus of deviant behaviors which have incapacitated him for independent functioning. From this point of view, changing the deviant behaviors is a direct and primary therapeutic intervention affecting the patient's basic difficulties.

The behavior modification approach was introduced to the psychiatric unit at Leahi Hospital, Honolulu, Hawaii, during the summer of 1967. Since that time it has been applied in increasing

scope. The present article attempts to elucidate the approach and its potential effectiveness with chronic psychiatric inpatients by reporting on aspects of its initial use at Leahi. Another concern is the effect on staff of this type of milieu therapy.

THERAPEUTIC SETTING

The psychiatric unit at Leahi cares for approximately 40 chronic patients on two wards. These patients have for the most part been transferred from the Hawaii State Hospital and are generally representative of the range of disturbances seen in chronic psychiatric hospitals. The initiative for the selection of the patients and problem behaviors to be focused upon rested primarily with the nurses.

I served as a consultant clinical psychologist in the design of behavior modification programs which were applied by the entire staff of the psychiatric unit, and also by summer students in special operant-conditioning sessions with selected patients. The design and application of these programs required detailed attention to specific overt behaviors of both the patient and the staff. In the consultation sessions the principles of behavior modification, as exemplified by the terms listed below, were translated into specific behavior guides for the staff.

Records were maintained as to the frequency of the problem behaviors and in some cases of alternate appropriate behaviors. In some instances such records were begun prior to the introduction of the modification procedures in order to establish an initial operant rate.

TERMS

Reinforcement: When a behavior is followed by something of positive value, the tendency for that behavior to recur is strengthened. This is the prin-

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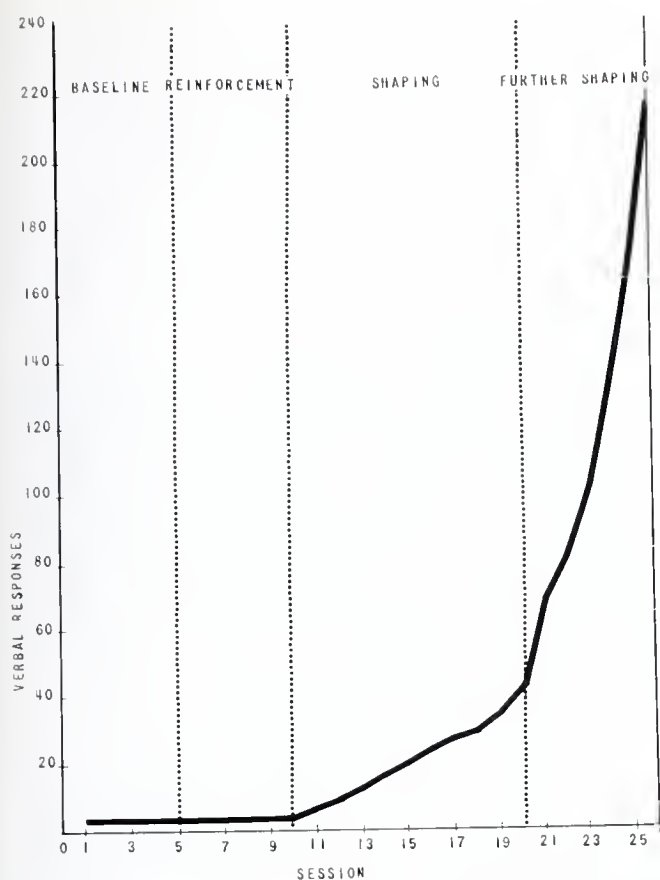


FIG. 1.—Cumulative frequency of verbalizations by Shiro in individual reinforcement sessions.

ciple of reinforcement. When a desired behavior is weak or infrequent, it can be amplified by presenting a reinforcer, or reward, contingent upon that behavior and immediately after its occurrence. While some reinforcers, e.g., food, are considered universal, in many cases individual events or objects must be found for each patient. That is, what is reinforcing for one patient may not be reinforcing for another. Reinforcers include several classes of objects and events. They may be tangible, like candy, or intangible, like a smile. They may be activities of the patient himself, like walking or resting, or activities of other persons, such as attention or praise.

Tokens may be effectively used as reinforcers. A token is something of no intrinsic value, which may be exchanged for valuable objects or privileges. Thus, for example, a poker chip may be given which can later be exchanged for a variety of things, like a meal, a cigarette, or an opportunity to see a movie. As reinforcers, tokens have some distinct advantages. Since tokens may be exchanged for a variety of things, they minimize the problem of satiation which may occur when a single reinforcer is used repeatedly. Secondly, as symbols, tokens permit immediate delivery of classes of reinforcers which in themselves could only be experienced at some different time and place, as for example, attendance at a dance.

Finally, tokens maximize reliance on the person's own determination of what is of value to him.

Shaping: Shaping refers to reinforcement procedures which begin by reinforcing an initial crude approximation to the desired behavior and subsequently require greater and greater refinement or extension of the behavior in order for reinforcers to be presented. That is, the standards for the behavior upon which reinforcement is contingent are successively redefined, so as to become progressively more demanding. By this means one may begin with crude amorphous activity and develop from it strong, well-defined actions.

Extinction: Extinction refers to the withholding of reinforcers which have served to sustain a behavior. The reinforcers are withheld only with respect to their contingency upon the behavior in question. The effect of this procedure is to diminish the strength of the behavior and in a treatment program it may be used to cope with undesirable behaviors. Extinction should be differentiated from punishment, which is the application of a negative reinforcer to a behavior. Punishment suppresses a tendency to behave by imposing a conflicting avoidance tendency. Extinction weakens the behavior directly.

INDIVIDUAL REINFORCEMENT SESSIONS

Individual therapy sessions incorporating reinforcement procedures were conducted with a few patients by graduate students in the summer work program. Typically, these were 20-minute sessions held five days a week over a period of about two months. The course of the sessions generally progressed through an observation phase, initial reinforcement, and shaping.

Shiro:* Shiro was a 58-year-old man who had been hospitalized since 1936, with only two brief periods outside. Prior to therapy, he had been described by the staff to be withdrawn, unsociable, nonverbal, and inactive. Observation in the preliminary phase of therapy corroborated this impression and revealed inappropriate affect and peculiar gestures. Therapy was oriented toward one goal: the establishment of speech.

Therapy was divided into three phases: (1) five days of baseline data gathering in which responses were noted but no reinforcement applied; (2) five days of reinforcement for vocalization; (3) 26 days of shaping vocalization. During the reinforcement phase, the therapist talked about current events and asked questions. When Shiro did respond verbally, he was immediately given a marshmallow. Here, the marshmallow was the reinforcer and its administration was contin-

* The names of patients have been altered in this paper.

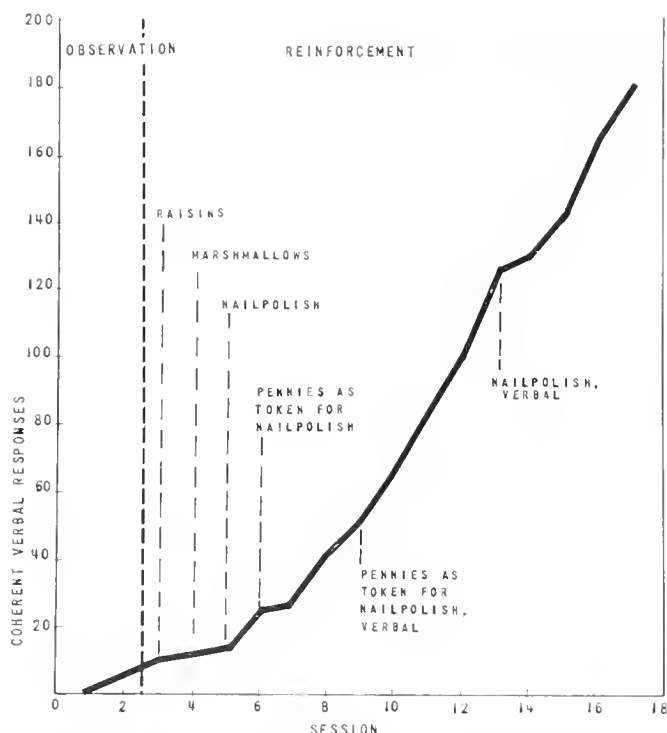


FIG. 2.—Cumulative frequency of coherent verbal responses by Mary in individual reinforcement sessions.

gent upon any verbalization. In the shaping stage the contingency became progressively more stringent, requiring two-word answers and finally three-word sentences.

Figure 1 shows the cumulative frequency of word usage across the first 26 sessions (complete data for the last ten days are unavailable). The increase is marked. In the first five days, before reinforcement was begun, he uttered a total of two words in the sessions. On the 33rd session he was up to 52 words. Interestingly, the increase in speech was not the only change. After the sessions, his therapist, commenting that his peculiar mannerisms had decreased, said, "There was no cheek scratching, little head nodding and chin holding. Eye-to-eye contact increased. He was able to sit without too much fidgeting and would show an increase in affect when spoken to. As the sessions progressed, he appeared somewhat more alert and answered questions quickly and easily." Subsequently, he was discharged as improved to a home for elderly men.

Mary: The goal for Mary, a 50-year-old woman who had been hospitalized continuously since 1930, was the development of coherent speech. In contrast to Shiro she was quite verbal, but her speech was incoherent. As with Shiro, a simple reinforcement procedure was used in 20-minute sessions conducted five times a week. At first eye contact was reinforced and then coherent speech.

It was hard finding a reinforcer for her. In the first two sessions, reinforcers were not presented

in order to establish an operant rate. In the third and fourth sessions, edibles such as raisins and marshmallows were tried, but did not function as reinforcers. In the fifth session, nailpolish was discovered to have reinforcing properties for her, and in later sessions pennies were given to her as tokens for nailpolish; that is, she could subsequently exchange the pennies for nailpolish. In addition verbal reinforcers, such as saying "good," were used.

Figure 2 shows her progress in coherent verbalization by her cumulative responses. It should be noted that the contingency for reinforcement after the initial phase was complex. There had to be speech and it had to be appropriate. Though no separate records were kept of other speech, it was the impression of the student who worked with Mary that her over-all verbal output was not increased. The change was toward a greater degree of appropriateness.

CONTINUOUS WARD PROGRAMS

In these continuous programs, behavior modification procedures were applied throughout the day by all members of the staff having contact with the patient. The procedures for the cases reported here were all individually tailored during the consultation sessions.

SIMPLE REINFORCEMENT

Betty: The program adopted with Betty, a 41-year-old woman with a history of intermittent hospitalizations since 1950, is fairly illustrative of a simple reinforcement procedure conducted continuously in the ward. Initially, she was reported to be a very seclusive person who showed no motivation on the ward and hallucinated freely. One of the nurses said of her, "She just sits like a lump." In an effort to draw her into meaningful interaction with others it was decided to begin by reinforcing (a) conversations with other patients, and (b) participation in games and activities in the recreation hall. Since Betty's problem incorporated a lack of motivation, the choice of a reinforcer presented some difficulty. It was decided to use paper discs as tokens which she could use to exercise privileges. With one token she could lie in bed in the daytime for half an hour, or sit in a soft chair for half an hour, or make one trip to places such as the cafeteria, business office, or coin dispenser. Without a token she could not exercise these privileges. Initially, she was given a small supply of tokens and was shown how these could be exchanged for the privileges. Reinforcement was begun with one token for each response defined as appropriate. Because she had been so

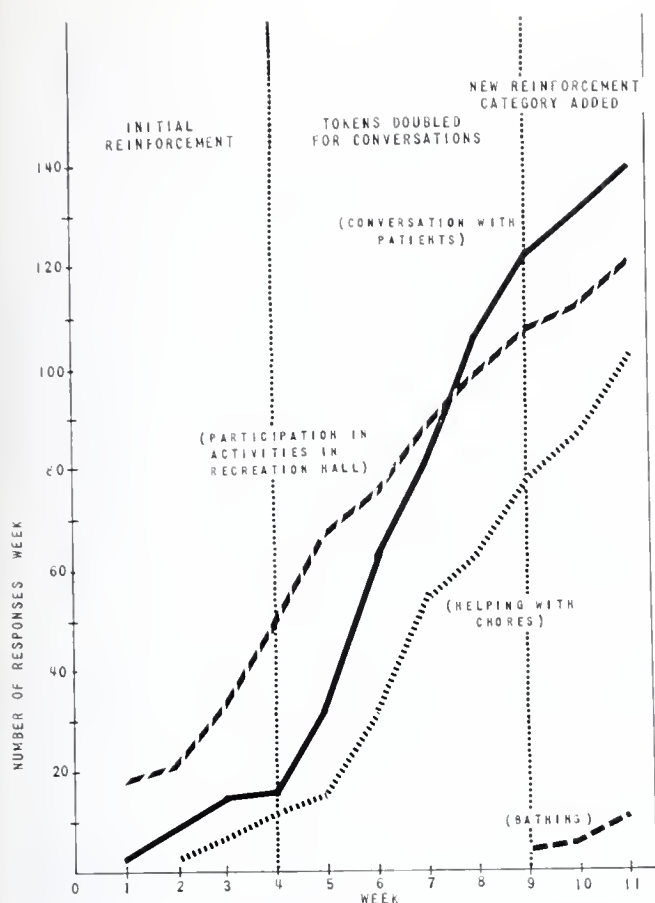


FIG. 3.—Cumulative frequency of four target behaviors of Betty being reinforced.

withdrawn, the initial contingencies for reinforcement were defined in order to be within her probable grasp. For example, for conversation she need only say one word.

Though no preliminary operant rate had been established by observation, it was the impression of the staff that Betty showed a very strong immediate reaction in the desired direction. Accordingly, in the second week an additional category of behavior, "helping with ward chores," was included and much later independent bathing was added. Figure 3 displays the cumulative frequencies of these reinforced behaviors from their inception into the reward program until the eleventh week. Some aspects of the effects of reinforcement procedures are apparent. At the beginning of the fourth week, it was noted that conversation had failed to increase substantially (note the plateau in Figure 3) while at the same time the other two behaviors continued to rise, especially participation in activities. It was felt that this reflected Betty's relative disinclination for speech. Therefore, beginning with the fourth week the magnitude of reinforcement for speech was doubled, while the other behaviors were maintained as before. Note the sharp rise in conversations which then occurred. This remains until the

ninth week. At this point, the fourth category of reinforced behavior was introduced and presumably the addition to the supply of tokens weakened their individual value.

Betty was shortly afterwards discharged as improved to a boarding home.

EXTINCTION COMBINED WITH REINFORCEMENT

Where one wants to strengthen or instill an appropriate behavior, a reinforcement procedure is indicated. When, however, one seeks to diminish or extirpate an inappropriate behavior, extinction may be used. The method here is to discover what reinforcers may be sustaining the undesired behavior and to withhold the delivery of these reinforcers after that behavior. It is often very effective to combine this extinction procedure with a procedure which reinforces a response incompatible with the undesirable response. Effectiveness may be enhanced where the reinforcer withheld for the undesired response is identical to the reinforcer administered for the desired behavior.

John: The program adopted with John is a good example of this procedure. John was a 28-year-old man who had been hospitalized since he was 21. Initially, he was childlike. His feelings were very easily hurt and when they were, he retreated to his bed, sometimes pulling the covers over his head. He would pout or cry and refuse to engage in activities, including going to meals and taking his medication. Though no count of this regressive behavior was made prior to the program, it was described as frequent, severe, and prolonged.

Preliminary discussion suggested that John thrived on personal attention and especially when it accorded him recognition as a "man." It was also discovered that when he had one of his regressive episodes, the response by the staff was to go to his bedside, assuage his injured feelings, and attempt to coax him to resume his activities. Eventually, he would respond to this.

The reinforcers seized upon for John were kindly attention and recognition as a man. According to the extinction procedure, whenever he had a regressive episode, he was to be ignored. No one, neither staff nor his father who often visited, was to go to him or say anything to him. The only exception to this was for medication. If he did not take it voluntarily, the nurses were to say that they expected him to act like a man, which in part means that he takes his medication voluntarily. If he refused, it would be administered as an injection.

The staff was instructed to give him attention and talk with him frequently when he was not in

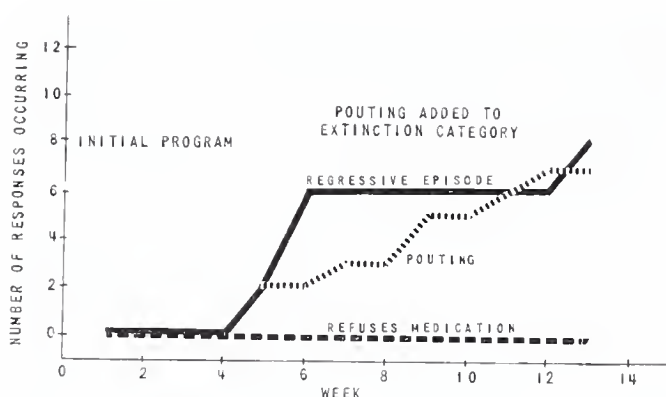


FIG. 4.—Cumulative frequency of the occurrence of three target behaviors of John which are undergoing extinction.

bed with one of his episodes. Though this applied to the entire staff, one of the paramedics with whom John had an especially warm relationship was given primary responsibility for implementing this. Visits from his father were welcomed at such times.

Figure 4 presents the cumulative number of incidents of regressive episodes, pouting and refusing medication, as they occurred during the course of the program. The frequency of these behaviors before the program was begun was not obtained. The behaviors represented in Figure 4 reflect only the undesirable behavior categories. It is apparent that the initial impact of the program for the first four weeks was to stop the regressive episodes. One cannot ordinarily expect to get such dramatic results so quickly with extinction procedures, and this initial effect may have been due to the reinforcement of incompatible behaviors. The strength behind John's old pattern of behavior is partially revealed in weeks five and six. It is during these weeks that the extinction is going on, and there follows a period of six weeks without a single episode. This second plateau may very likely be attributed to both phases of the program, extinction and reinforcement.

At the end of the fourth week, pouting occurring by itself was added as a behavior to be extinguished. This was partly because at that point regressive episodes were not apparent and a logical next step was to extinguish approximations to or components of these episodes. It also seemed that pouting had increased, which is understandable as a more appropriate alternative than the complete episode. It is very likely that the inclusion of pouting stimulated the temporary return to the complete episodes. Since then John has shown remarkable progress. In the past four months he has had only one regressive episode, and it was brief and mild. He is now maintaining paid employment. Each day he now lives with stresses

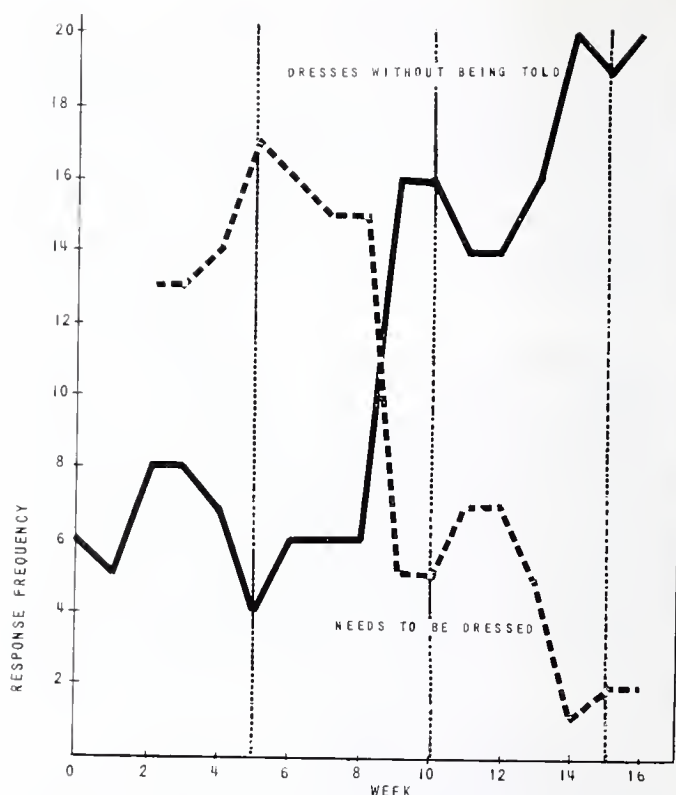


FIG. 5.—Frequencies per week of two dressing behaviors of Mary. The solid line represents dressing without being told, which is being reinforced. The dotted line represents requiring to be dressed, which is being extinguished.

far greater than those which used to provoke his episodes.

Mary: This patient was described briefly in the section above on individual sessions. After the termination of these sessions devoted to coherent speech, attention was then given to the problems she presented with eating and dressing. She did not attend to her personal care and had to be dressed. She ate very little and only in response to prompting, sometimes having to be fed.

For reinforcers poker chips were used as tokens. She could exchange these for candy or nailpolish, or, later, watching television. Talking to her and helping her were also used. She was introduced to the tokens gradually. At first she was given five tokens, and then at nourishment time asked for the tokens and given candy in exchange. Then she was given four tokens, and had to work for the fifth for candy. The amount she was freely given was reduced each time until she was using only tokens given for appropriate performance.

With respect to eating, a time limit of 15 minutes was established after which her tray was removed. If she did not eat during this period, no one was to say anything to her. If her refusal to eat was in any part sustained by the reinforcers imbedded in coaxing, prompting, and helping, these would then extinguish. If she did eat, she was to be given a token and something pleasant

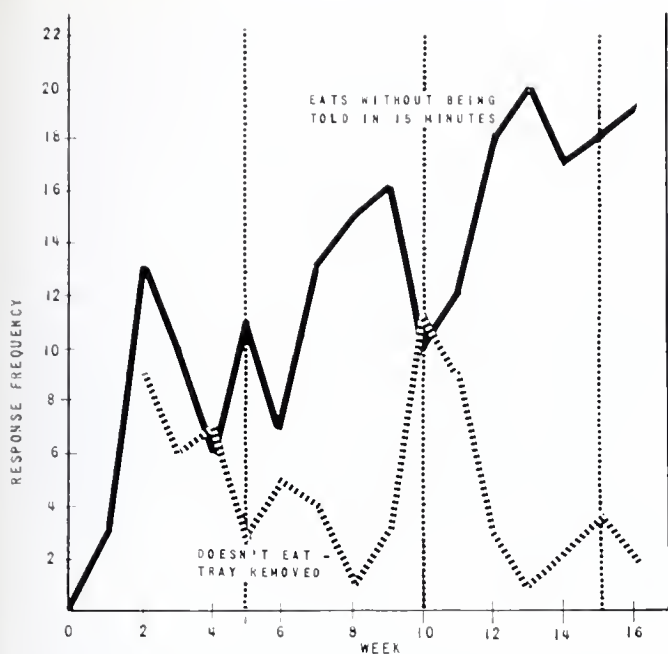


FIG. 6.—Frequencies per week of two eating behaviors of Mary. Eating without being told represented by the solid line is being reinforced. The dotted line represents refusal to eat, which is being extinguished.

said to her. The same procedure was used during nourishment time as well.

When she began to dress herself, then one of the staff was to go to her, offer to help her, praise her. If she would not dress herself, the staff was instructed to dress her in a fast and sloppy manner, being careful not to talk to her.

Figure 5 portrays the frequencies per week of her dressing by herself and requiring to be dressed. In this and Figure 6 straight frequencies rather than cumulative frequencies are plotted, to emphasize the difference between the behavior being reinforced and the behavior being extinguished. The typical week-to-week fluctuations in the context of an over-all trend are clearly portrayed. In Figure 5 it is apparent that, despite some setbacks, the tendency for her to dress herself without being told rises substantially upward during the course of the program, while her requiring to be dressed diminishes almost entirely. Figure 6 reveals the same effect on eating. Eating without being told rises to almost every meal, while not-eating diminishes.

Mary made sufficient progress in her speech and her ability to sustain herself in daily living during this program to permit subsequent discharge to a boarding home. This discharge followed a history of 38 years of continuous hospitalization.

June, Sue, and Helen: Though each of these patients had individually tailored programs which included a wide variety of behaviors, they all shared in common appropriate conversation as a category of behavior to be reinforced, together

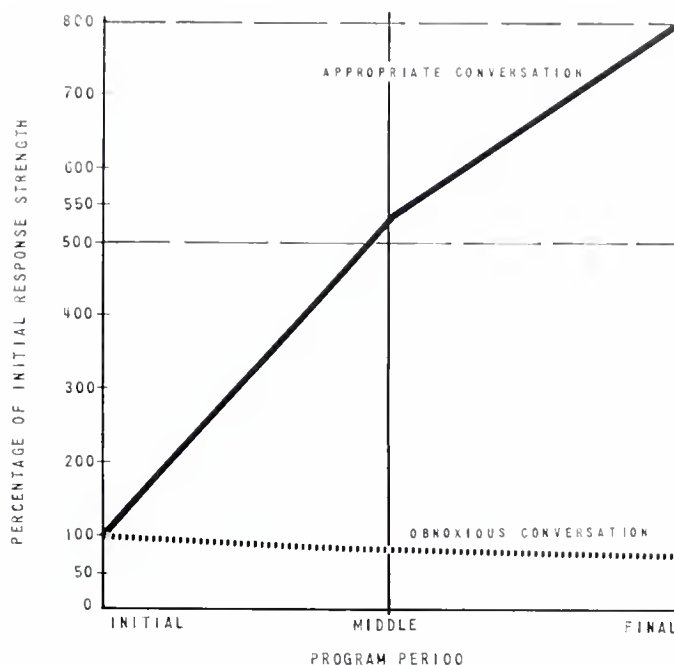


FIG. 7.—Mean percentage of initial response strength for two target speech behaviors for June, Sue, and Helen. Three weeks are represented, viz. initial week, middle week, and final week. The percentage of initial response strength for each period was computed for each patient and then averaged.

with some category of inappropriate speech to be extinguished. The nature of speech would seem to be a highly important behavior, for when it becomes bizarre, a variety of interpersonal and environmental consequences ensue.

Figure 7 summarizes the results of the program of reinforcement for appropriate conversation with these three patients and extinction for obnoxious conversation carried on with two of these patients. Obnoxious conversation was not recorded for one of them. The procedures utilized were simple variants of the types described in other patients. Figure 7 averages three weeks, viz. the initial week just prior to the program, the middle week in the program, and the final week. What is portrayed is the mean percentage of initial response frequency. There is a marked rise in the frequency of appropriate conversation to 800% of the initial level. Obnoxious conversation declines during this period to 77% of the initial level.

Helen was subsequently discharged and is able to work.

STAFF REACTION

The behavior modification program at Leahi had an impact not only for the patients but also for the staff. The approach demands focusing on observable behaviors. The staff must be attuned to patient behaviors and also to their own behaviors in relating to patients. Guidelines established in the consultation sessions required specified actions and reactions for them. No

measures were taken of the impact of the program on staff; but Mrs. Rhodes, supervising Registered Nurse, comments as follows:

"The Leahi Hospital Mental Health Unit has been in existence for three years. Initially, the combination of an inadequately prepared staff, of frequent staff turnover, and of staff conflicts was not conducive to a therapeutic environment. Staff morale was low. During this period, various therapies were included in the treatment program: e.g., milieu therapy, occupational therapy, rehabilitation therapy, pharmacotherapy, and activity groups. None of these, except perhaps pharmacotherapy, produced any significant observable changes in patient behavior. A multi-discipline staff sensitivity group was held for approximately eight weeks . . . This experience proved unrewarding and, in some cases, even traumatic.

"The entire staff, noncommittal at first, soon became enthusiastic about the behavior modification program. Here was therapy that included the entire staff. Everyone felt comfortable in dealing with observable behaviors. We began to focus on individual behavior patterns in a more meaningful manner. Definite goals were established and the means to these goals were quite clear. Staff found it comforting to know 'what to do' and 'what not to do.' Ignoring 'sick' talk was difficult at first, but this attitude changed simultaneously with improved, socially acceptable patient behavior. Part of staff enthusiasm was due to observable, fairly rapid changes in patient behavior—they 'saw' results. In a few cases, the patients seemed to generalize specific learning to other areas in their lives and this was exciting to staff. Staff felt also that focusing on nondeviant behavior was much more pleasant and pragmatic.

"Over-all, we are 'sold' on implementing behavior-modification techniques in our situation. There were, however, some difficulties staff had to deal with. We had to work through feelings of whether or not we were considering the individual's 'right' to sick talk because he was, in fact, a patient; whether or not behavior modification techniques were the only effective treatment; and whether or not it was ethical to seclude patients for challenging and sick behavior . . . Some staff members became quite rigid and soon saw the patient not as a person but as a number of categories."

DISCUSSION

Those concerned with the program at Leahi were generally favorably impressed by its accomplishments. Patients were reported to seem more

alive and involved. Disturbing behaviors were reduced while appropriate behaviors were amplified. The staff reaction appeared to be quite positive. Indeed, this favorable impression was sufficiently strong that the behavior modification approach at Leahi was subsequently expanded to embrace every psychiatric patient in a total unit program.

However, this article seeks primarily to illustrate the implementation of a behavior modification program. With respect to evaluation, the present study is suggestive but not definitive. Several further steps would be of great interest. Should a research orientation clearly prevail over a clinical orientation, refinements permitting more satisfying comparisons and program alterations could be made. But beyond this type of consideration, several substantive questions remain to be explored.

What, for example, is the effect on patient behavior when the reinforcement program is terminated? It would seem that if the behavior is socially and individually appropriate and desirable, naturally occurring reinforcements would come to sustain it. However, if the patient is to return to a disturbed environment which provides peculiar rewards, privations, and punishments according to idiosyncratic contingencies, this may not obtain.

Is the favorable effect on staff morale ephemeral? Some studies have indicated that the novel introduction of anything into a work situation may improve morale. As the program at Leahi continues to evolve, perhaps a better assessment of its effects on the staff may be made.

Can the number, quality, and interrelationships of behavioral changes be sufficient for "chronic" inpatients to be restored to a life that is not only independent but personally satisfying? This is an exciting challenge for the approach.

ACKNOWLEDGMENT

The author wishes to express his appreciation to Carolyn K. Staats, Ph.D., and to the staff on the psychiatric unit at Leahi Hospital, without whom the program reported here could not have been conducted. Dr. Staats initiated the program at Leahi Hospital and consulted on many of the cases reported here.

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Can autoimmune reactions illuminate myocardial infarction? Probably—but not much, so far.

Serum Protein Patterns in Acute Myocardial Infarction

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● *The serum of acute myocardial infarction patients was analysed for various serum protein patterns and subjected to immunological tests, the results of which were compared with a nondiseased population. A tendency toward a deficiency in the IgG level, a high concentration of β -lipoprotein, and a high incidence of positive rheumatoid factor were found in the diseased group.*

HUMAN SERUM protein patterns may be altered by internal tissue injury. Previous studies have been conducted with isoenzyme and serum electrophoretic patterns in patients with acute myocardial infarctions. In this study, serum samples of patients with myocardial infarctions were examined for immunoglobulin (IgG, IgA and IgM levels, α_1 -acid glycoprotein, and β -lipoprotein). Immunological studies were also conducted for C-reactive protein (CRP), rheumatoid factor (RA), and antinuclear factor (ANF). The results were compared with those obtained from a healthy control group. The patients' sera showed a decreasing tendency of IgG, an increased β -lipoprotein level, and a high incidence of RA.

MATERIALS AND METHODS

Serum samples were obtained from 16 patients, 31 to 80 years of age, with acute myocardial in-

farctions (14 men and two women). The diagnosis of myocardial infarction was made according to clinical symptoms and confirmed by EKG in each case. Blood samples from 13 cases were drawn within two days following the onset of the disease and the remainder drawn on the third, sixth, and seventh days. As a normal control, sera were taken from a nondiseased population (140 men and 20 women) with a similar age distribution and stored at -20°C . prior to use.

Antiserum specific to each IgG, IgA, and IgM class was prepared by immunizing New Zealand albino rabbits with each immunoglobulin fraction isolated at this laboratory. The purity of each fraction and antiserum was determined by immunoelectrophoresis.¹ The α_1 -acid glycoprotein was kindly supplied by Dr. Karl Schmid, Boston University, and the antiserum was also prepared at this laboratory by immunizing rabbits with this substance.

The immunoglobulin and α_1 -acid glycoprotein levels were examined using a modification of a simple radial immunodiffusion technique.² Diffusion of the test samples was allowed as follows at room temperature: Four hours for the IgG level, 18 hours for IgA, and 24 hours for α_1 -acid glycoprotein. The determination of the IgM level required 24 hours at 37°C . in an incubator. At the end of the diffusion period the diameter of the circular precipitin patterns was measured with a finescale (Finescale, Los Angeles, California) and converted into mg per 100 ml concentrations

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TABLE 1.—Serum protein patterns and immunological reactions of the patients.

CASE NO.	SEX	AGE	DAY BLOOD DRAWN	IMMUNOGLOBULIN LEVELS (mg%)			α_1 -ACID GLYCO-PROTEIN (mg%)	β -LIPO-PROTEIN (mm)	CRP	RA	ANF
				IgG	IgA	IgM					
1.	M	68	0	620	122	78	125	2.3	0	0	0
2.	M	64	1	880	405	40	184	3.0	++	0	0
3.	M	31	1	540	180	42	190	2.0	++++	0	0
4.	M	56	1	1120	250	63	86	4.0	0	0	0
5.	F	50	1	620	122	53	153	6.0	0	+	0
6.	M	44	2	800	208	154	144	2.9	0	++	0
7.	M	64	2	430	407	103	128	2.3	0	0	0
8.	M	80	2	1120	305	137	110	3.5	++	++	0
9.	M	70	2	1120	250	40	125	3.5	0	0	0
10.	M	65	2	880	250	123	144	3.3	+++	0	0
11.	M	67	2	880	208	40	128	4.3	0	++	0
12.	M	72	2	1120	490	59	108	5.8	0	0	0
13.	M	58	2	650	124	24	123	3.2	0	0	0
14.	M	67	3	1000	388	88	99	2.0	+	+++	0
15.	M	66	6	540	198	70	137	2.4	0	+	0
16.	F	65	7	1000	171	70	137	1.9	0	0	0
Mean value \pm S.D.				832.5 \pm 238.2	254.9 \pm 113.7	74.0 \pm 38.0	132.6 \pm 27.5	3.28 \pm 1.24	31.2% \pm 1.24	37.5%	0%
Normal value \pm S.D.				1184.2 \pm 318.5	248.3 \pm 104.2	89.5 \pm 42.5	133.7 \pm 33.6	2.68 \pm 0.43	0	0	0

using a standard curve which was plotted according to sera of known concentrations. The standard errors of five estimations of each protein fraction taken from the same samples using different plates on different days were found to be less than 10 mg per 100 ml. Standard sera for the Ig levels were provided by Hyland Laboratories. The α_1 -acid glycoprotein of known concentration was supplied by Dr. Karl Schmid.

Antiserum for the CRP test and for the β -lipoprotein level measurement was obtained from Hyland Laboratories. The RA and ANF tests were performed by a latex agglutination method using a reagent also obtained from Hyland Laboratories. The tests were carried out using the methods described by the manufacturer.

RESULTS

The results are shown in Table 1. The mean IgG value in the diseased group (832.5 ± 238.2 mg per 100 ml) was more than one standard deviation lower than that of the normal group (1184.2 ± 318.5 mg per 100 ml) while the mean values of IgA and IgM were not altered.

The level of α_1 -acid glycoprotein in the patient group showed a similar value to the normal control in this study. However, a higher level of β -lipoprotein was found in the diseased group when compared with the control, with the mean values obtained being 3.28 mm and 2.68 mm respectively.

Positive CRP results were observed in five cases (31.2%) while the RA test produced six cases (37.5%) out of 16. No positive reaction for ANF was demonstrated in either the diseased or the normal group.

DISCUSSION

Davies and Clark³ reported that the amount of 7s (IgG) gamma globulin was significantly decreased in the case of myocardial infarction and they concluded that this gamma globulin deficiency might be an etiological factor in coronary-artery disease.

The present study indicated that IgG levels in most patients with myocardial infarctions showed a decreasing tendency when compared with a normal control, but the mean value was not significant. IgA levels in some cases were found to be higher although most of the cases seemed to be normal. The IgM level was shown to be within normal values.

Tokita et al.⁴ found that the nonspecific elevation of α_1 -acid glycoprotein was significant over a limited period of time after the stress of major surgical operations, during pregnancy, or after delivery. They measured the concentration of α_1 -acid glycoprotein in serum by a direct chemical method with 45 mg per 100 ml as the normal value of the fraction in the serum.⁵ Soothill⁶ used a semiquantitative measurement for α_1 -acid glycoprotein by means of Ouchterlony's double gel

diffusion method and the normal level of the fraction was 125 mg per 100 ml with a standard deviation of 30 mg per 100 ml. The present study, using a simple radial immunodiffusion method, showed a similar value in normal subjects to the observation of Soothill. The differences in the normal values obtained from the two methods, chemical analysis and immunoassay, were probably due to the sensitivity of the methods.

Rheumatoid factor has been found at a higher rate in the serum of patients with myocardial infarctions⁷ and the present cases also showed a high incidence (37.5%). The number of samples studied was small and further study will be necessary to define the significance of rheumatoid factor in patients with myocardial infarctions. The evidence of a high incidence of RA and a lower level of IgG suggested that some immunological reaction may be involved in the process of a myocardial infarction.

The present study demonstrated a few cases of positive CRP reactions, but no conclusive results were obtained.

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*We're learning more and more about bronchial asthma
but we still can't figure out just what causes it.*

Childhood Bronchial Asthma in Hawaii

W. A. MYERS, M.D., MARTHA BRUYERE, and P. T. BRUYERE, M.D., M.P.H., *Honolulu*

● *Elementary school children proved to be satisfactory subjects for an investigation of the causes of bronchial asthma in Hawaii. Asthmatic and nonasthmatic absence rates provide a ready index of prevalence.*

Asthma attack rates were found to be higher on weekends and short holidays, judging by figures from two schools and two pediatric clinics. A higher percentage of asthmatic children lived in the wettest areas studied, but the attack rate for these children was lower than that for children living in the driest area. Lower humidity or temperature, and higher wind speed, were each associated with increased numbers of attacks.

THE PURPOSE of this study was to formulate a method of investigating the local environmental causes of bronchial asthma in Hawaii. Few diseases are more dependent on the total environment of the individual than bronchial asthma. A person's general physical and mental health, his family, the air he breathes and the food he eats,

the climate in which he lives, are all involved. The sum total of these factors at any one time, plus the circumstances just preceding them, determine the times of onset and the frequency and severity of attacks.

Many factors important in causing bronchial

TABLE 1.—Number and rate per 100,000 population of deaths due to asthma in the State of Hawaii and in the United States, 1955-1966.*

YEAR	STATE OF HAWAII		UNITED STATES		PERCENT DIFFER- ENCE
	Number	Rate per 100,000 population	Rate per 100,000 population	DIFFER- ENCE	
1955	20	4.7	3.6	1.1	30.57
1956	31	6.1	3.6	2.5	69.44
1957	26	4.8	3.9	0.9	23.08
1958	26	4.6	2.9	1.7	58.63
1959	22	3.8	2.8	1.0	35.71
1960	32	5.4	3.0	2.4	80.00
1961	29	4.7	2.7	2.0	74.07
1962	33	5.2	2.6	2.6	100.00
1963	24	3.7	2.7	1.0	37.04
1964	38	5.6	2.4	3.2	133.33
1965	26	3.7	2.2	1.5	68.18
1966	34	4.8	2.2	2.4	109.09

* Source: Unpublished data, Hawaii State Department of Health, Research, Planning and Statistics Office.

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TABLE 2.—Asthma-hay fever prevalence rates per 1,000 population, by broad age groups in sample surveys of the United States and of Oahu, Hawaii.

AGE GROUP	UNITED STATES* 1957-1958	OAHU, HAWAII† 1958-1959	OAHU, HAWAII‡ 1964
All ages	48.1	77.5	101
Under 15	39.1	93.2	n.a.
15-24	55.6	97.3	n.a.
Under 25	n.a.	n.a.	117
25-44	51.9	68.7	97
45-64	53.2	45.5	69
65 and over	45.9	27.7	41

* National Health Survey Report No. 12, Series B. (Quoted in reference below.)
† "Health Characteristics of Children and Youth," Hawaii Health Survey Report No. 5, Hawaii State Department of Health, 1962.
‡ Oahu Health Surveillance Program: Bruyere, Scott, and Bennett. HAWAII MEDICAL JOURNAL, 24:436 (July-Aug.) 1965.

asthma and allergic rhinitis on the mainland are either absent or minimal in Hawaii.¹ Honolulu, in general, has a so-called "ideal" climate, with minimal temperature and barometric pressure fluctuations, moderate humidity, and low pollen and mold spore counts as compared to most of the temperate zone.^{2, 3} "Clean" sea air is a relatively stable factor, since trade winds are fairly constant in direction and velocity for weeks and months at a time.

Nevertheless, the death rate from asthma in Hawaii is considerably higher than the national average.⁴ (Table 1). This seems especially significant, since most asthma deaths occur in older persons, whereas Hawaii has a younger population than do other states.⁵ (Table 2). In addition, surveys on the island of Oahu have shown higher prevalence of bronchial asthma and allergic rhinitis than have surveys made by similar methods on the mainland.⁶⁻¹⁵ (Table 2).

Finally, in a recent survey, asthma and hay-fever combined constituted the most frequent cause of chronic illness on Oahu, their prevalence being nearly three times that of "high blood pressure," the next most frequent cause.⁶ This difference is of a greater magnitude than that reported for the mainland in a similar study.⁶

Hawaii offers a unique opportunity for clinical studies of respiratory allergy. First, as noted above, the prevalence of asthma and allergic rhinitis is apparently higher than on the mainland; second, the population is relatively stable; and third, within the limits of its geographical location, Hawaii contains a number of areas in which the ethnic composition of the population, the type of vegetation, and the local microclimate differ considerably from place to place.

TABLE 3.—Number of pupils in two Manoa schools investigated as possible asthmatics, number excluded for various reasons, and number included in study group.

	TOTAL	MANOA SCHOOL	NOELANI SCHOOL
Possible asthmatic pupils investigated	135	93	42
Exclusions	50	32	18
Inactive	30	21	9
Not asthmatic	13	7	6
Not resident in Manoa Valley	7	4	3
Active cases	85	61	24
Recalcitrant, chronic, or psychogenic	10	5	5
Completely studied	75	56	19

PROCEDURES

Selection of Population for Study

We chose for our study children of elementary school age attending public schools in Manoa Valley. This age group, roughly five to twelve years of age, generally has already developed extrinsic sensitivities, contains a higher proportion of active asthmatics, is closely supervised, and probably leaves the home and school neighborhood less frequently than do older groups within the population.

Two elementary schools in the valley serve the local community almost exclusively: Manoa School (1,100 students) located in the upper third of the valley, and Noelani (385 students), in the middle-lower portion. The enrollment of the two schools (1,485) was presumed to be large enough to include about 125 active asthmatics, or about eight percent of the total school population. However, we did not know what percent of an elementary school population would have at least one attack during a school year. As it turned out, 122,* or 8%, had a history of asthma, but only 85, or 5.7%, were known to have had an attack during the year preceding the last month of the study, and only 75, or 5.1%, could be included in the study, for various reasons. The breakdown of children investigated is given in Table 3.

For comparison, we used two groups. The first was a control group (350) of nonasthmatic children at the two schools. It was hoped to compare such factors as ethnic background, absence rates and reasons, and residential distribution in Manoa Valley. The second was composed of children treated, within the period of the study, for asthma

* Total of 135 investigated; 13 found to be nonasthmatic.

attacks at two clinics whose patients come from the city and county of Honolulu at large: Straub Clinic Pediatrics Department, and Kapiolani Children's Hospital emergency room. The purpose here was to obtain a sampling of the daily number of bronchial asthma attacks in the general population, ages one to 15. The total number of attacks treated at these two clinics from January to May, 1966, was approximately 750.

Identification of Asthmatic Children

An "asthmatic" child for purposes of this study was defined as one having a history of attacks of dyspnea, with expiratory wheeze, unless such history was explained on some other basis such as cardiac failure, chronic bronchitis, emphysema, bronchiectasis, and so on.^{16, 17, 18} An "active asthmatic" was defined as a child who had had at least one attack of asthma during the year previous to the end of the study. An "inactive asthmatic" was one who had a history of asthma but had experienced no attacks during that same year. The final decision as to diagnosis rested with the child's physician, together with the principal investigator.

Collection of a Basic Medical History

On the medical history form were recorded the various facts of each asthmatic's total environment that might be of value in diagnosing the cause of the bronchial asthma. The basic medical history form was completed by a registered nurse on her first visit to the child's home and as early in the school year as possible. In addition to the medical history, apparent general home care, pets, type of bedding, unusual dampness or signs of mold, and impressions as to reliability of informants were recorded. We hoped that such detailed study might suggest some general preventive measures that could be useful to physicians as well as to parents of asthmatics in Hawaii.

Collection of Asthma Attack Data

The asthma attack form was designed to provide pertinent medical information and circumstances surrounding each attack, and was completed by the nurse, following each attack. The procedure was as follows:

The field coordinator visited Manoa and Noelani schools daily to check records. She gave the nurses the names of the possible or known asthmatics who were absent, and also names of those who had been reported as having had a recent attack.

Each youngster was then investigated by a nurse, who made an appointment with the parents

in order to complete the asthma attack form. The time of onset of the prodromal symptoms and of the actual wheezing or dyspnea was recorded when known. We attempted to get detailed information concerning the environment of the child at the time of and just preceding prodromal symptoms of each attack. The possibility of an infection, ingestion of unusual food, or unusual activity was recorded. Questions concerning the presence of any illness in other members of the family were included to help determine the probability of an infection precipitating the asthmatic attack. Parents were asked to report by telephone or postcard those attacks occurring during weekends and holidays.

ENVIRONMENTAL FACTORS

Climatic Factors

Of the usual climatic factors influencing one's environment, the following are generally considered unfavorable for asthmatics,¹⁹ although there is disagreement as to the relative importance of each factor or combination thereof.

1. Conditions that increase prevalence of respiratory infections.²⁰
2. Conditions that increase mold spore and pollen counts.²¹
3. High wind speed or turbulence.²²
4. Air inversion phenomena which may increase air pollution.²²
5. Relatively sudden drops in temperature, especially the passing of a cold front.²³
6. Constant high humidity or very low humidity.¹⁹

None of the above affects all asthmatics, but probably all affect some. The prevalence of asthma in a given area may be primarily influenced by certain climatic conditions plus factors such as air pollutants (including an abundance of pollen and molds). However, relatively sudden changes in weather conditions plus such factors as respiratory infections, diet changes, increase in air pollution, pollen, spores, and the over-all influence of emotional factors may be responsible for triggering attacks.^{20, 24, 25, 26, 27, 28}

We were able to investigate the possible correlations of daily attack rates in Manoa Valley and in a group of children from Honolulu at large, with fluctuations in temperature, humidity, rainfall, wind speed and direction, and pollen and mold spore counts. We used the school absence data plus questionnaires to indicate the presence of an increase in respiratory infections. The distribu-

TABLE 4.—Total monthly rainfall in inches recorded at four stations in Manoa Valley and at the Honolulu International Airport during the survey period by month and year.

	DECEMBER 1965	JANUARY 1966	FEBRUARY 1966	MARCH 1966	APRIL 1966	MAY 1966	TOTAL
Hawaii Sugar Planters Experiment Station* (elevation 500 feet)	26.16	10.90	4.03	6.63	3.41	3.64	54.77
Manoa School† (elevation 200 feet)	15.76	7.54	6.10	1.10	1.56	1.85	33.91
Cooper Road* (elevation 180 feet)	14.65	8.02	6.26	1.26	1.08	1.43	32.72
University of Hawaii* (elevation 80 feet)	9.94	6.29	5.32	0.51	0.79	0.96	23.93
Honolulu International Airport* (elevation 8 feet)	8.00	1.40	3.70	0.39	0.46	0.41	14.36

* U. S. Weather Bureau recorded statistics.
† Manoa School Weather Station.

tion of asthmatics according to where they lived in the valley was briefly investigated.

Pollens and Molds

Pollens and mold spores are important in the etiology of asthma in Hawaii, although the atmosphere counts are small as compared with the mainland.^{29, 30} Many of the pollens and all of the mold spores are present in the air twelve months of the year. Connell⁵⁹ and others have demonstrated that daily exposure of the nasal mucosa to even a small number of pollen grains will increase an allergic individual's sensitivity manifold, so this may prove to be a very important local factor.

Air Pollution

Because the necessary specialized equipment was not available to us, we did not attempt to study particulate matter or gases in the air. Some work in this field has been done by the Environmental Health Division of the Hawaii State Health Department. It finds that "Hawaii is not free of air pollution. Under certain meteorological conditions, the build-up of air pollution can reach levels equal to or exceeding levels of pollution found in other cities of comparable size in the United States." . . . "The formation of oxidants, the identifiable compounds of smog, is readily triggered by Hawaii's clear sky and sunshine."^{*}

Manoa Valley—Residential Area

Manoa Valley is oriented in a northeast by southwest direction on the south side of the Koolau Mountain Range. The residential area, about one mile wide, extends up the valley two and one-fourth miles northeast of the University of Hawaii.

Residences are quite evenly distributed on the valley floor and up both slopes toward the head of the valley, at elevations varying from 80 to 400 feet.

* Robert Nekomoto, Supervisor, Air Sanitation Section of State Health Department, in a prepared talk to members of the Conservation Council of Hawaii, October, 1967.

Vegetation throughout the Manoa residential area is fairly uniform. It is somewhat less luxuriant on the lower valley floor. There, weeds and grass tend to die out in the dry months of the summer and more particulate matter may be present in the air during dry weather. In contrast, the upper two-thirds of the valley is quite damp all year.

Manoa Valley—Climate

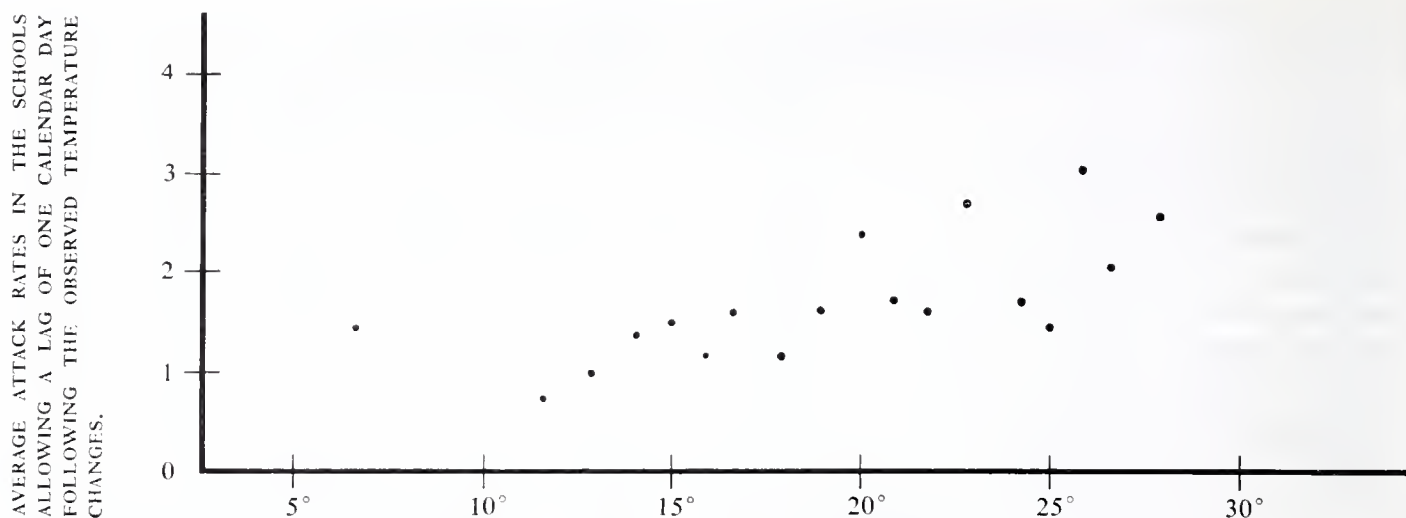
The prevailing winds throughout most of the year are the east-northeasterly trades blowing down the valley.² They are generally more persistent in the summer than in the winter. The trade winds blow across the island and over the Koolau Mountains for a distance of seven miles before reaching Manoa Valley. Having traversed several thousand miles of open ocean, they are moisture-laden by this time, but carry few or no air pollutants, except a small amount of pollen and mold spores.^{29, 30} When the trades are weak, an ocean breeze from the southwest may be noted during the day, and a "land breeze" from the northeast at night.

Stronger winds from the southeast and southwest ("Kona winds") occur for short periods throughout the year but are more common in the winter months. Southerly winds, when light, tend to bring smog, dust, and traffic fumes from the more densely populated areas of Honolulu and allow them to collect within Manoa Valley.

The average annual rainfall in this area varies from 20 inches at the seacoast to 40 inches at the University of Hawaii, 45 inches* at Noelani School, 60 inches at Manoa School, and up to 150 inches farther up the valley at the upper limits of the residential area. During the time of this study, monthly rainfall varied at some of these locations as shown in Table 4.

In general, rainfall and humidity increase, and temperature and sunshine decrease, from the foot

* Estimated, by comparison with recorded U.S. Weather Bureau data.



Calendar day drop in temperature in degrees Fahrenheit, U. S. Weather Bureau Station, Honolulu International Airport. (This is a computed index; see text for details.)

FIG. 1.—Relationship observed between temperature changes and the reported attack rates at Manoa and Noelani Elementary Schools.

of the valley to the head, and from the floor of the valley up the slopes of the mountains on either side. The middle and lower thirds of the eastern slope are drier and warmer than the opposite western slope and western half of the floor below, due to the direction of the prevailing winds and to the afternoon sun.

Manoa Valley—Weather Station

Through the cooperation of Manoa School, a weather station was set up on the school grounds to collect data on temperature, rainfall, wind speed and direction, and relative humidity. Airborne pollen and mold spores were also collected here.

The station was equipped with the aid of the United States Weather Bureau and the University of Hawaii Department of Geosciences. Apparatus consisted of an 8-inch rain gauge, maximum-minimum thermometers, hygrothermograph, totalizing anemometer, and a wind vane. Data obtained from this station were compared with those collected at the University of Hawaii and at the U.S. Weather Bureau station at the Honolulu International Airport.

During the study period, it was found that the average daily range of temperature was about 10° F. at Manoa School, although occasionally the fluctuation was as great as 22°. Maximum temperature was usually reached at about 2:00 P.M., and the minimum at about 4:00 A.M.. The daily maximum temperature at Manoa averaged six degrees cooler, and the daily minimum temperature averaged about two degrees cooler, than the daily maximum and minimum temperatures at Honolulu airport.

Relative humidity at Manoa School fluctuated between 100% and 45%, with the highest daily value being reached usually at about 4:00 A.M. and the lowest at 2:00 P.M. The dew point was not calculated at this station. We used data from the U.S. Weather Bureau at the airport for most of our calculations. These data were more complete and accurate than those which were obtained during the short time that all the instruments were available at the Manoa weather station.

FINDINGS

Asthma Attack Rates and Daily Temperature Fluctuations

An increase in attack rates in Manoa Valley schools was correlated with an increase in the difference between maximum and minimum daily temperatures (using figures recorded at the airport) from January to May, 1966, and especially so during January and February. An index consisting of the maximum temperature, multiplied by the difference between the maximum and minimum temperatures for the day, and divided by 100 for convenience, was computed. Tables showing the changes in this calculated index together with corresponding attack rates for the five months were prepared. These indicate that a relationship, probably real in the statistical sense, does exist and can be clearly seen from the scatter diagram chart prepared from this material (Fig. 1).

Asthma Attacks Treated and Daily Temperature Fluctuations

The index of diurnal temperature fluctuations which correlated well with daily attack rates among

Manoa Valley school children was also found to correlate with the number of attacks of bronchial asthma or "asthmatic bronchitis" (according to recorded diagnosis) treated at the Straub Clinic Pediatrics Department and Kauikeolani Children's Hospital emergency room. In comparing the number of attacks with the temperature index, allowance was made for the possible lag of 24 to 48 hours between onset of attack and the child's attendance at the clinics.

The belief that a sudden drop in temperature may trigger attacks of asthma is fairly common among both asthmatics and physicians. A number of recent publications seem to confirm these clinical impressions.^{23, 31, 32, 33} A drop in temperature has been correlated with an increase in asthma attack rate in many studies in temperate climates; however, most of these studies are of temperature changes associated with the passing of a cold front and involve much greater fluctuations in temperature and barometric pressure than occur in Honolulu.³³

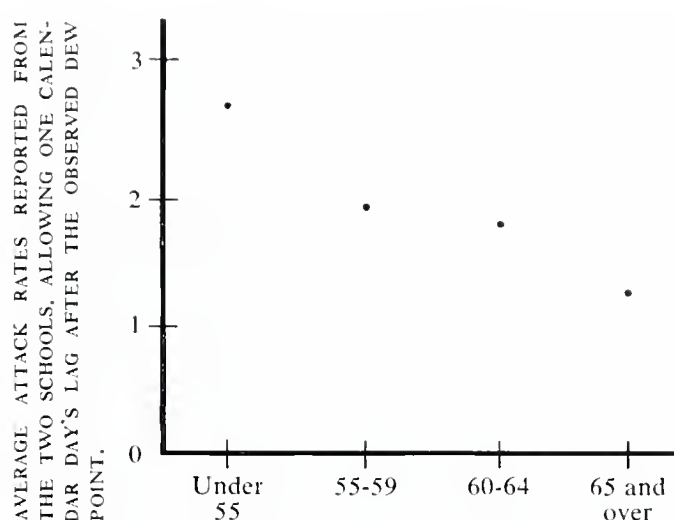
It is thought by some investigators that most if not all asthmatic (and perhaps most allergic) patients are hypersensitive to temperature change because of some physiologic defect in their thermoregulatory mechanisms.^{34, 35}

Asthma Attack Rates and Average Daily Dew Point

Increased humidity is generally assumed to be detrimental to asthmatics, although a number of studies show no such correlation.³⁶ As illustrated by Figure 2, there was an inverse correlation between the average daily dew point and the attack rates at the Manoa schools. A similar inverse correlation was noted between average daily dew point and the number of asthma attacks treated at the two Honolulu clinics.

Relative humidity is the ratio, expressed in percent, of the amount of water vapor actually present to the maximum amount that could be present in the air at the existing temperature. Hence, with a fixed amount of water vapor, a rise in temperature lowers the relative humidity and a fall in temperature increases it. Dew point, on the other hand, is a measure of the absolute amount of moisture in the air. Dew point can also be defined as the temperature at which the water vapor in the air begins to condense. In our studies, dew point was used instead of relative humidity because its daily fluctuations are in general very much less, and are not temperature dependent in the same sense as is relative humidity.

Although unusually heavy city fog does seem to be related to an increase in asthma attacks,^{37, 38}



Dew point observed at the U. S. Weather Bureau Station, Honolulu International Airport.

FIG. 2.—The relationship between the dew point and attack rates reported from Manoa and Noelani Elementary schools.

according to Tromp of the Netherlands,³⁴ fog without air pollution does not increase the attack rates. Increase in humidity is beneficial in the treatment of an asthma attack because it seems to help liquefy thick bronchial secretions which are a complication of the disease. A damp climate, however, encourages the growth of molds, rusts, pollen, and vegetation, and may increase the antigenicity of house dust.^{39, 40} We do not know why a temporary drop in dew point or decrease in relative humidity would be associated with an increase in asthma attack rates, although this has also been found by others.^{32, 41} Perhaps some associated factor is the real culprit, such as an increase in particulate matter.

Geographic Distribution of Asthmatic Children in Manoa Valley

Four areas were arbitrarily selected differing in degrees of dampness as estimated by considering the factors of elevation, distance up the valley, and average relative amount of sunshine. Area One was considered the wettest (approximately 150 inches of rainfall per year), and Area Four the driest (approximately 40 inches per year).

1. On a map of Manoa Valley we plotted home locations of actively asthmatic children in our study. We hoped to discover some correlation between relative dampness or dryness and attack rate. The number of active asthmatics and the total of all attacks were tabulated for each area. The average number of attacks per child was calculated for each area. Probably due to the small sample and to the fact that even the driest of the four areas is far from arid, results were inconclusive, but suggest that children living in the damper sections have fewer attacks than those

who live in the drier areas (Table 5). The difference between Areas One and Three was significant ($P<.01$) by the chi square test, as was the difference between the combined Areas One–Two and Three–Four.

2. We also plotted the home locations of our control group of nonasthmatics together with all asthmatics to compare the relative prevalence of asthma in each area. The percentage of asthmatics among children living in the wettest area was significantly higher than the percentage of asthmatics among children living in the driest area.

The two sets of findings appear contradictory but this may be due to the small number of asthmatics, especially in the driest area, and a less than ideal control group. An interesting point is that although a higher percentage of asthmatics as compared to nonasthmatics live in the wettest area, the group of active asthmatics from this area averages fewer attacks per person than do active asthmatics from the three other areas (Table 5).

Attack Rates vs. Clinic Visits for Asthma

The number of asthma attack visits to the Children's Hospital emergency room and the Straub Clinic Pediatrics Department was compared with the number of asthma attacks reported from the two Manoa schools. Data were complete enough to make this comparison for the months of January through April, 1966, excluding the week-long Easter vacation. Six hundred fifty attacks (approximately equally divided between Children's and Straub) were treated at the two clinics, and 140 were reported in the Manoa group. The daily variation for the two sets of data, with a few exceptions, was remarkably similar. Apparently the triggering causes of asthma attacks occurred at about the same times in Manoa Valley and in most of Honolulu.

In Manoa Valley, several of the attack peaks were apparently due to respiratory infections, because they were preceded and accompanied by an increased absentee rate for both asthmatics and nonasthmatics. These absence rates were two or more standard deviations above the mean among both groups.

Additional Findings in the Schools

1. The percentage of asthmatic children differed in distribution by grade level, and as a percentage of total enrollment in each school. Manoa had a lower percentage of the total asthmatics and of active asthmatics.
2. It was found that in general for all pupils the rate of absences tended to decrease from the lower to the higher grades. This was particularly evident at Manoa School. And in both schools

TABLE 5.—Total attacks and average number of attacks per active asthmatic in two Manoa schools as related to home location in Manoa Valley.

AREA	ACTIVE ASTH- MATICS	ATTACKS	AV. NO. ATTACKS PER PERSON
Area One (wettest)	50	114	2.28
Area Two	11	33	3.00
Area Three	8	34	4.25
Area Four (driest)	6	20	3.33
TOTAL	75	201	
Area One and Two (wettest)	61	147	2.41
Area Three and Four (driest)	14	54	3.86

and at all levels, the asthmatics' absentee rate was roughly twice that of the nonasthmatics.

3. In both schools, attack rates tended to be higher on weekends and short holidays. Ingestion of unusual foods, family tensions, unusual activities, more time spent within the home where house dust and mold spores tend to be more prevalent than at school, greater notice paid by parents to the milder attacks, overfatigue, and greater exposure to pets all may be possible causes.

4. The ethnic composition of the asthmatics in the two schools was similar: Japanese, 60%; Caucasian, 13%; Chinese, 8%; Filipino, 3%; all others, 16%.

Additional Climatic Factors

Increased wind speed has been associated with increased asthma attack rates in various studies both in Hawaii and elsewhere.^{1, 22} It plays an important part in increasing the particulate matter in the air, and may also be accompanied by a sudden drop in temperature, particularly when associated with the passage of a cold front.

It was found that during the months of January, February, and March, 1966, in Manoa Valley, of the 31 days on which the attack rate was above the mean, there were only seven days, or 22.5%, on which the fastest wind speed as recorded at the airport was less than 17 miles per hour on the day of, or on one of the two days preceding, the observed elevated attack rate. Of the seven days, three occurred during an Asian-type "flu" epidemic, which may have been responsible for the higher attack rate.

Increased rainfall did not seem to be correlated with peaks in attack rates, perhaps because a heavy rain temporarily reduces air pollution, including pollen and spores, and increases humidity.⁴²

Barometric pressure was not recorded because it is relatively stable in Hawaii. The daily variation

TABLE 6.—Pollen collected in Manoa Valley, January to March, 1966 (22 slides encompassing 89 days).

NAME	TOTAL COUNT	% OF ALL POLLEN FOUND	% OF SLIDES FOUND ON
Grasses	304	6.4	86
Leucaena glauca ("haole koa")	219	4.6	45
Cecropia	150	3.1	18
Chenopod	113	2.4	40
Others identified	352	7.4	
TOTAL IDENTIFIED	1138	23.8	
Pollen "X"	3482	72.8	"All"*
Others unidentified	164	3.4	
TOTAL UNIDENTIFIED	3646	76.2	
TOTAL POLLENS	4784	100.0	

* See text.

in pressure does not exceed three millibars, which, for example, is only about one-tenth the change that may occur within a few hours with the passing of a cold front or of a low pressure area on the mainland.^{1, 33}

Pollen and Mold Spore Counts^{21, 43, 44, 45}

Pollen and spore samples were taken at the Manoa School weather station in January, February, and March, 1966, and are tabulated in Tables 6 and 7. A vane-mounted impaction sampler was used, with the leading edge of the slide as the collection surface.*^{29, 46} Slides were put out with differing numbers of days of exposure in order to determine the optimum exposure time.

The purposes of this short survey were: (1) to establish a suitable method of collecting airborne mold spores and pollens in Hawaii; (2) to establish an approximate estimate of pollen and spore fluctuations in order to permit a comparison with our asthma attack rates and weather data; (3) to identify as many spores and pollens as possible, and to estimate their relative numbers in the air; and (4) to make a comparison with previous surveys in Hawaii.^{9, 29, 30, 47, 48}

An unidentified (and so far unidentifiable) pollen "X" accounted for at least 72.8% of the total, and in February and March was found on all exposed slides. Pollen "X" reached a peak count on February 27 and March 20, and was also probably responsible on January 16 for the "unidentified pollen" peak under which classification it was then being counted.

Spores collected during January, February, and March, 1966, are listed in Table 7. Of the identi-

* The usual gravity method of collection is not satisfactory in Hawaii because of the relatively low pollen and spore content of the air.^{29, 30}

TABLE 7.—Mold, smut, and fern spores collected in Manoa Valley, January to March, 1966 (22 slides encompassing 89 days).

NAME	TOTAL COUNT	% OF ALL SPORES FOUND	% OF SLIDES FOUND ON
Negrospora	970	22.3	67
Pleospora	285	6.5	45
Stemphyllium	219	5.0	45
Curvularia	213	4.9	65
Helminthosporium	182	4.2	57
Torula	171	3.9	40
Cercospora	158	3.6	9
Rust—smut	108	2.5	18
Others identified (including Alternaria, Cladosporium, Fusarium & Penicillium)	189	4.3	
TOTAL IDENTIFIED	2495	57.3	
Unidentified spores	1861	42.7	
TOTAL SPORES	4356	100.0	
Fern spores	399		

fied genera, only Alternaria, Cladosporium-Hormodendrum, Torula, and Fusarium are among the ten most commonly found on the mainland.⁴⁴ The first three, together with Penicillium, are considered important allergens.

The most common mold spores found in our survey are the same as those found by Roth in January, February, and March of 1964 in Honolulu.²⁹ The single exception is the rusts, which predominated in his study but were negligible in ours.

Although our mold spore and pollen counts were not extensive enough to prove any correlation with asthma attack rates, they did suggest some possible relationships in conjunction with wind speed.

Concurrent with the survey of airborne pollens and mold spores at Manoa, a six-month study of the relationship of household air spores to respiratory allergy was conducted by Drs. Joseph Oren and Gladys Baker.

Beside the mold spores and pollens, there are rusts, algae, and fern spores, about which very little is known in relation to asthma.^{49, 50, 51}

Areas of Needed Future Investigation

Air pollutants needing further study as possible causes of bronchial irritation in Hawaii include the following:

1. Much smoke is produced in some areas by the burning of sugar cane but as yet it does not blow over large populated areas.
2. Considerable crystallized salt from the ocean

is airborne at times of high winds and storms.⁵² The crystals carry a thin layer of organic material picked up from the surface of the sea. This organic matter is said to cause nasal irritation under certain conditions, but as far as we know, it has not been studied as a possible antigen.

3. A majority of homes in Hawaii are of wood construction and may contain much "dry rot" mold and termite "dust." "Dry rot" (*Merulius lachrymas*) has been reported as a cause of asthma⁵³ but termite "dust" has not.

4. Mosquitoes and cockroaches are a problem in some areas, and insecticides may be used frequently. The excessive use of aerosol insecticides has recently been found to correlate with an increase in prevalence of asthma in the homes.⁵⁴ Cockroaches themselves have been recently implicated as a possible cause of asthma.⁵⁵

5. House dust from coastal areas elsewhere has been shown to be more highly allergenic than inland samples, presumably because coastal climate is warmer and more humid.^{39, 40, 56} The recent implication of a species of mite (*Dermatophagoides pteronyssinus*) as the main antigen in house dust may prove to be important locally, since apparently a warm, damp climate favors the proliferation of this mite.⁵⁷ Local house dust mites are now being studied at the University of Hawaii.

6. Dust from airfield runways made with dredged coral was thought to produce considerable bronchial irritation and asthma in Hawaii during World War II. Much coral is still being used as fill and on roads, and may possibly continue to be an irritant in some areas.

7. Air ion density as a factor in respiratory allergies has not been investigated here to our knowledge.⁵⁸

8. Finally, we have even heard of matter from local volcanic eruptions blamed for asthmatic attacks. This has been called "vog."

More complete pollen and mold spore surveys should be done and correlated with asthma attack rates and skin tests. The identification of local mold spores and pollens (including pollen "X") would be very useful.

We had hoped to develop some significant data related to the individual's total environment that would help local physicians counsel parents of asthmatic children on such items as preferable areas in which to live; climatic and inhalant factors which should be considered; influence of working mothers on attack rates; and the relative importance of weather conditions compared to other causes of asthma such as infections, inhalants, and foods. We believe this whole subject remains a vital area for further study.

1. This pilot study demonstrates a practical and satisfactory method of investigating causes of bronchial asthma in Hawaii. It compares a group of asthmatic and nonasthmatic children of elementary school age. These children live and attend school in a relatively isolated area of Oahu with a fairly homogeneous ethnic and economic composition and environment.

2. The use of elementary school children is an economical method of gathering data for this type of study. Much pertinent information is readily available from school records, and the organizational structure facilitates communication and good public relations between investigators and parents.

3. The recording of school absentee data and the comparing of asthmatic with nonasthmatic absence rates seems a fairly satisfactory method of indicating the presence of respiratory infections in the schools and their association with asthma attack rates.

FINDINGS

1. Of the 1,485 children enrolled in two elementary schools in Manoa Valley, 122 (8.2%) had a history of asthma, but only 75 (5.1%) could be studied in detail.

2. The asthma attack rates were usually higher on weekends and on short holidays.

3. The covariation of daily attack rates for the two schools and the number of attacks treated at two clinics serving the general pediatric population of Honolulu, and used in our study as a comparison group, were similar.

4. A significantly higher percentage of asthmatics lived in the wettest area; however, these children had a lower attack rate than those living in the driest area.

5. The daily attack rates in the two schools and the number of attacks treated in the two clinics tended to increase with a drop in dew point (decrease in humidity).

6. The daily attack rates in the two schools and the number of attacks treated in the two clinics tended to increase with a drop in temperature.

7. It appears that even minor daily variations in temperature and humidity (in spite of the relatively stable climatic conditions) are as often associated with changes in attack rates in Hawaii as are much greater daily and seasonal fluctuations in temperate zones.

8. During January, February, and March,

1966, an increase in attack rates in Manoa seemed to be associated with increased wind speed.

9. Pollen and mold spore counts usually increased with increased wind speed.

10. The relative numbers and species of identified pollen and mold spores were similar to previous findings in Hawaii. A large percentage of pollens (76.2%) and mold spores (42.7%) remain unidentified.

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Olga Myers assisted in arranging and typing the final draft of the report.

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The President's Page



One of the areas in the changing world of medicine which requires a great amount of study and discussion is the development of programs to train allied health personnel to assume the roles and responsibilities which traditionally have been confined to licensed physicians.

The primary reason for innovating and experimenting with this concept in medical care delivery is the critical shortage of physicians which exists in many areas. Personnel is needed to fill the gaps in the health care system. In addition, through more efficient use of personnel (right-person-right-job), medical costs may be stabilized. By training people to assume some of the responsibilities which by tradition have been delegated to physicians, unavailable services may be provided in a smoother, more dependable manner. The quality of care may also be improved through realignment of responsibilities to give physicians more time to practice medicine to the full extent of their training and experience.

Training programs for nurses and other allied medical personnel are being developed throughout the country, including Hawaii. Most of the ongoing programs involve pediatric care, but programs in orthopedics, multiphasic screening, and surgical assistance are also being initiated. Inevitably problems will develop and questions will be asked.

- How will these individuals be classified and who will participate in defining their exact roles?

- Who will be involved in the development of training ground rules and how will the work in the hospitals, clinics, and doctors' offices be supervised?

- Will this new concept woo personnel away from the established allied medical services, some of which are already facing critical manpower shortages; and who will determine priorities?

- Will the insurance industry be willing to modify the prepayment programs to pay for care now provided only by physicians?

- How will a redistribution of legal responsibility be developed and what effect will this have on the premium levels and availability of malpractice insurance?

- Will physicians accept the change? And how will the employees react to the new responsibilities?

- To what extent will the educational institutions cooperate and accept reorganization of their programs?

The Legislature has requested a report on the need in Hawaii for these newly emerging paramedical occupations, including the establishment of certification standards and occupational categories. We await with interest its findings. But the key to continued exploration and experimentation for the ultimate development of this change in the concept of delivery of health care is patient acceptance. Will the patients who now complain that their doctors do not spend enough time with them accept services provided by nonphysicians?

Serge H. Mills M.D.

Kidney Transplant: a First for St. Francis Hospital

The successful transplantation of a human kidney in Hawaii was accomplished for the first time on August 10, 1969, at St. Francis Hospital, in Honolulu. It was done again on August 13 and again on August 17; and though the first procedure ended in rejection, the second and third, up to the time of writing, have not.

General surgeon Livingston Wong and urologist Herbert Chinn were the principal protagonists in this team achievement, assisted by thoracic surgeons Glenn Kokame and Richard Pang and general surgeon Walton Shim. Arnold W. Siemsen, internist and nephrologist in charge of the hospital's renal dialysis unit, coordinated the whole effort; one of the team said he was the "orchestra conductor." David Hume, from the University of Virginia medical school, was brought to Hawaii as a consultant to provide supervision and counsel.

Press relations were predictably disturbed by a well-meant but probably misguided effort to insure complete secrecy in the interest of the patients and their families. It was impossible of achievement, and the almost immediate leaks provided more furor, rather than less, than a carefully prepared press release would have created. When a press conference was finally held, the third transplant, scheduled for the following day, was not mentioned.

The complete willingness of all the surgeons and physicians involved to insure their own anonymity for as long a time as possible is praiseworthy, of course; but in a situation like this, the interests of the medical profession as a whole, the hospital, and really even the patients themselves, are probably best served by early, full, and orderly disclosure through the appropriate channels provided by the County Medical society's public relations committee and the Hawaii Medical Association's public relations counsel, Mr. Hugh Lytle. Such restraints as the physicians concerned may feel it desirable to impose can then be requested, and within reason will surely be respected, by the press.

The method actually used here was doomed to failure in large part, if for no other reason, because of the numerous anonymous telephone calls and even letters to the newspapers purporting to tell them what was going on.

Despite these problems, which were not the fault of any person but the result of multiple unforeseen factors, the whole procedure of these transplants was carried out in the most admirable fashion, and reflects the greatest credit upon all of the participants and upon St. Francis Hospital. To all of them, our warmest congratulations!

An Open Letter to the H.M.A.*

Health forums of the type that occurred at the Ilikai are happening across the country. These attempts at dialogue between consumers and providers of health care, recent national legislation, statements by Secretary Finch and President Nixon, and growing concern in the private sector indicate that there is indeed a health care crisis. Recent local meetings between representatives of labor and management and the HMA are en-

couraging and could well provide a mechanism for resolving the crisis as it presents itself in Hawaii. It is commendable that the HMA has elected to involve itself in dialogue of this kind.

As in all initial attempts at dialogue, common ground must be defined. At these meetings it was apparent that such was not established and the discussion was conducted on two different planes. The two planes result from a discrepancy between the physician's perception of health care and that

* Written by request.

of the consumer. The consumer is the recipient of all aspects of the health care delivery system and sees it from that point of view. He is feeling the pinch of the rising cost of health care. In the American form of medicine, the consumer—correctly or incorrectly—looks to the physician as the leader of the health care delivery system, and thus the man best able to initiate change. On the other hand, the physician traditionally has been primarily concerned with a single aspect of the system, albeit a very important one.

Now physicians are being challenged to assume a role of leadership. However, at these meetings they gave no indication that they were ready or willing to accept this role. Rather, they responded in a very limited sense by denying any responsibility for the rising cost of medical care, thereby responding to only a small part of the problem. In addition, they have reacted to the consumer's perception of the problem rather than the problem itself. Reaction of this kind compels the physician to assume a defensive posture which is not consistent with a position of leadership.

Leadership requires that all aspects of medicine as it is practiced now be subjected to thorough reevaluation. We submit:

- that charity medicine, though commendable, is no longer adequate to meet the needs of the medically indigent;
- that existing mechanisms of financing medical care are inadequate;

- that both physician and consumer attitudes towards ancillary medical personnel inhibit creative use of their talents;

- that the sum total of well-intentioned physicians practicing good medicine will not meet contemporary needs.

The situation demands a concerted effort by providers (physicians, nurses, pharmacists, medical social workers, etc.) and consumers of medical care; all groups must become involved and do more than defend specific vested interests and "sacred cows." The "expectation gap" must be closed: demands must be tempered in light of the limitations of the health care delivery system; response to demands must become innovative and less protective of the status quo. *Mutual* education of all interested parties is essential to fruitful dialogue.

Activism is not a dirty word. All physicians are being asked to become active in finding solutions to health care delivery problems. As future providers of medical care, we are particularly anxious to see physicians assume a role of leadership.

ALICE BERG
GARY GUTCHER
CORNELIUS LANE
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*Student American Medical
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"Inside HMA"

Don't miss our new feature column, "Inside HMA," written by Dr. John Brown. It will keep you informed about current activities of the Coun-

cil and committees of the Hawaii Medical Association. They are busy—so busy we can't tell the whole story. But the highlights will be there.

Blackjack Blues

Looking forward to that forthcoming trip to Las Vegas and a little gambling? Beware! Other hazards besides beady-eyed con men await you in those dimly lit casinos.

According to the *New Scientist*, June 5, page 510, "It's no easy life being a confirmed gambler. Crap shooters who spend marathon sessions at the table suffer from varicose veins and other circulatory disorders of the legs. Really long-serving dice throwers can even develop dependent edema, a sort of waterlogging of the lower limbs. Roulette buffs and card players can be stricken by a disease called 'blackjack dermatitis,' which is caused by a reaction to the chromic salts used to dye the green felt of the tables. Gamblers addicted to one-armed bandits have been afflicted by 'slot machine arm,' brought on by prolonged handle-pulling, and considered to be more painful than tennis elbow. And the more sensitive amongst them are plagued by the unpleasant symptoms of nickel allergy resulting from long periods of clutching coins in slot-feeding hands."

Benefits of Illness

That society may materially benefit from the illness of the individual is perhaps not too well appreciated by the majority of physicians, continuously indoctrinated as they are from their earliest student days with the necessity for stamping out disease and alleviating suffering. In previous centuries the hypermetabolic state associated with advanced pulmonary tuberculosis inspired many famous artists and composers to heights of artistic accomplishment.

Today, this peculiar synergism between talent and disease is seen most frequently in the realm of the psychiatrist. Many intelligent and gifted persons with manic-depressive psychosis show tremendous creative productivity during their manic swings and will often elect to endure the subsequent episodes of depression rather than have these cyclical swings smoothed out by drugs like Thorazine or lithium.

The superior achievers in our society also seem to be peculiarly prone to develop psychosomatic illnesses when physical and mental pressures become overwhelming. Often, these illnesses appear peculiarly suited to the individual's particular life situation. The singer develops laryngitis; the star pitcher, a sore arm; and the thinking executive,

migraine. These illnesses are beneficial in that they allow an honorable and socially acceptable retreat from an overwhelming and ego-threatening situation, thereby preventing personality disintegration. Misguided attempts by physicians to overtreat and cure these essential ills may reduce talent to mediocrity and in rare cases result in complete physical and mental breakdown.

Ritual Execution

Despite abolition of the death penalty, several innocent persons are executed in Hawaii each year. The site of these executions is rather rigidly delineated, being immediately adjacent to a body of water such as a beach, stream, or swimming pool. The victim dives into the water, hits his head against the bottom, sustains a cervical fracture, and floats unconscious to the surface. Well-meaning onlookers rush to the rescue, quickly dragging and carrying him from a watery grave. Unfortunately, they almost invariably forget to support his head, which, acutely hyperextended and rolling from side to side, effectively transects the spinal cord.

Paradoxically, the unfortunate victim is safest while floating in the water, which acts as a total body splint and effectively prevents excessive movements of the head on the trunk. Ideally, after insuring an adequate airway, he should be left in the water until a rigid body support (a surfboard is ideal) can be obtained and slid under the body. He can then be lifted in toto from the water and transported, still lying on the board, to the hospital.

We teach rescue workers on land, to "splint them where they lie." Let's spread the word that for water injuries it's "support them where they float!"

Not by the Rooms, But . . .

Our inquisitive youngsters have rediscovered an old diversion, the dissection of golf balls. Aficionados of this ancient sport probably know that at the center of each ball is a liquid core. Not so well known, perhaps, is that this liquid is under extremely high pressure and when cut into may explode with great force, causing injury to the skin or eyes. A good example of a situation where one should definitely *not* keep one's eye on the ball. ■

W. PHILIP JONES, M.D.

Telling It Like It Is. This month we begin a new column, intended to keep you, the members of HMA, informed of the goings on "Inside HMA."

The **Public Relations Committee**, under new Chairman Cesar B. De Jesus, M.D., held two meetings this summer in regard to setting up this column and meetings with representatives of labor and management.

The **Negotiating Committee** on June 26 met with Mrs. Amo and Dr. Gantenbein of the Veterans Administration to negotiate a new fee schedule. They were using the HRVS with a conversion factor of five, but went to 6.5 effective August 7, 1969. VA regulations there must be lapse of at least 21 months between the agreement on the new schedule and the beginning of the use of that schedule. The HMA has requested seven for the next contract period. All physicians must be aware that any payment from the VA is payment in full. The VA does not pay the four percent tax added by some physicians. Any physician may treat a VA patient. Each patient has an identification card stating the illness or disease for which he may be treated. If there is any doubt about whether the illness is covered, call the VA on the telephone! Use regular billing methods and forms; there is no special VA form. All physicians' bills should be submitted at the end of each month. In treating nonemergency cases, prior notification from the VA is required. In the treatment of emergency cases, the VA must be contacted regarding the treatment within 15 days of the onset of treatment.

The **Medical Care Plans Committee** met on July 2 to discuss the proposal of Dr. Robert Chung, regarding Medicaid. Dr. Chung has proposed that the HMA constitute itself as a medical group for the purpose of treating these patients on a contract, not fee-for-service basis, and that the sum appropriated annually for medical care be transmitted direct to the HMA. The members would not receive individual payment, but would hold an equal interest in the common fund that resulted, which fund would constitute a very powerful economic force in the community.

The **Japanese Speakers Bureau** met on July 1 and September 16. Four new members have been added to this committee which appears on a

regular KOHO radio program to speak to Hawaii citizens in Japanese. A panel program on KIKU-TV, on a monthly basis, begins in October. The possibility of this committee, cooperating with the Speakers Bureau to provide speakers for Japanese language groups, who are generally retired people, was discussed.

The **Arrangements Committee** is actively working on next year's convention. It was decided to move the date of the annual meeting up one day, as the hotel is booked on Saturday, so next year's convention will start on Tuesday. *Rx, Sports, Travel* magazine has offered to furnish trophies and keep scores for the sporting events.

The **Scientific Program Committee** has an interesting slate of speakers lined up and reported that the financial support is being obtained from a number of sources.

The **Diabetes Committee** discussed the summer camp for diabetic children, which had an enrollment of 14 children. The purpose of the camp is not to segregate diabetic children from other children, but to teach the children to live a "normal" life.

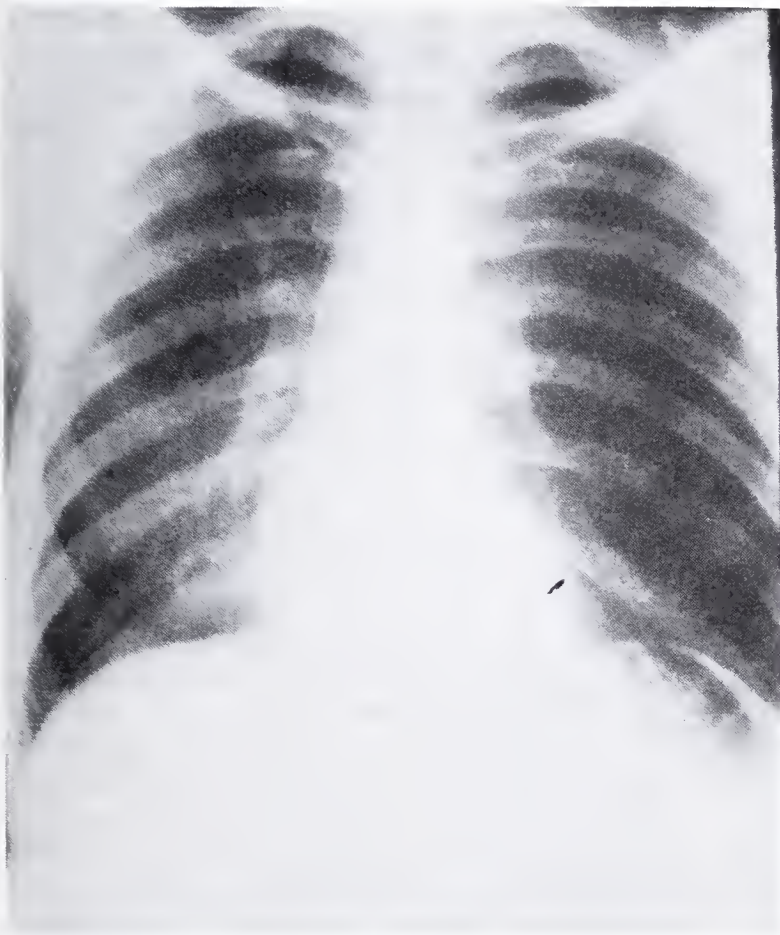
The **Ad Hoc Committee on Drug Abuse** discussed the Department of Education's plan to set up a program on drug abuse.

The **News Media Committee** is assigning its members to key news medium personnel to work closely with them. The committee is inviting news medium representatives to its meetings and is revising a list of hospitals spokesmen and updating the HMA Code of Cooperation. Dr. Mills listed news items which will need coverage over the next 24 months. The committee discussed ways of getting active cooperation in submitting entries for the annual journalism awards.

The **School Health Committee** recently discussed the visual testing program in schools; the program on drug abuse; qualifications for various sports; the details of which were mailed to all HMA members; the Red Cross involvement in the schools; and a review of legislation passed in the last session which related to student health.

The **Medical Services Commission** discussed the activities of the various committees making up the commission, especially the proposal on Medicaid before the Medical Care Plans Committee, negotiations with the VA and the DSS. ■

J. R. BROWN, M.D.



● Patient is a sixty-one-year-old Caucasian man, a professional fabric dyer and finisher, complaining of cough with a small amount of thick yellow mucus.

● Temperature was 100.6°.

● Family and past history was non-contributory except for a long history of smoking one to two packs of cigarettes daily.

● Physical examination was negative.

● The clinical impression was early right lower lobe pneumonia.

● The chest film shown was taken (lateral view corroborates the PA).

Answer is below.

Diagnosis: Progressive pulmonary dystrophy or so-called "Vanishing Lung." (Note the complete absence of bronchovascular markings on the left.) Has been recorded in ages from 18 to 72 years; no sex predominance; more often unilateral than bilateral; and the left lung seems to be affected more often than the right. Cor pulmonale appears only late in bilateral cases. The process is slowly progressive, with increasing dyspnea, becoming constant. Examination of the chest eventually reveals an exaggerated percussion note over the affected area and breath sounds are absent or subdued. Differential includes pneumothorax, large pulmonary cysts, pneumatocoele, senile emphysema, and bronchial asthma with emphysema. See Uehlinger, E.: Roentgen Diagnostics, Progress, Volume 1, pp. 368-377; Grune and Stratton, 1958.

Submitted by the
RADIOLOGICAL SOCIETY OF HAWAII
THOMAS C. BROWN, M.D. ■

This is the eightieth installment of In Memoriam—Doctors of Hawaii.

Eric Adolphus Fennel

“The proper autobiography, I suppose, consists of the things one has been and done, and the things one hopes vainly to be and to do. As I look back over my life, things and deeds, accomplishments and failures



DR. FENNEL

seem not as important as are the People who have infringed upon my life—have shown me at least one facet of their lives—to alter mine—and have gone their way, unknowing the effect of a word, an action or a look.

“Hans Zinsser, having looked into a microscope at his own lymphocytes and having found there his death warrant, sat him down and wrote a charming autobiography without once (save in the title) using the first person singular: *R. S. [Romantic Self]. As I Remember Him*. He had lived a full life and accomplished much and manifestly was faced with the difficulty of sorting, before he died, the important facts from those unimportant.

“I knew Hans Zinsser rather well; tried to make myself more like him; and were I to write my autobiography, I should call it, not as he did *As I Remember Him* but *As I Remember Them*. For now, growing old and introspective, I find that what I have done or thought is quite unimportant and uninteresting, but that the people I have known and the sides of their lives and minds that they have shown me have been to me quite important, and to any student of human nature, quite interesting and instructive. By and large, these people, who have influenced my life, unimportant as it is to others, but not at all to me, have been interesting, kind, lovable, and very very human; only a few have been mean, small, selfish, acquisitive, unprincipled and mentally filthy.

“As I said, my life has been made up, not of things, but of people, and when I find myself with the leisure following retirement I hope to tell about

some of those who have made me think, say or do things, and know I shall be forgiven by those of you who love me for what I am—or have been.”

Written by E. A. F. in 1944

Eric Adolphus Fennel was born September 24, 1887, in Cincinnati, Ohio, the son of Otto William Fennel, M.D., who was born in Cincinnati in 1861. To quote Dr. Martin H. Fischer, “Eric was born not only into a Family but into an Atmosphere, in a city which was undergoing great medical and cultural changes.”

The father of Dr. O. W. Fennel was Adolphus Fennel, born in Cassel, Germany, in 1824, an apothecary of the Old School who came to Cincinnati in 1851. Known affectionately as the “Professor,” he was a founder of the Cincinnati College of Pharmacy, owner of the famous old pharmacy of A. Fennel and Son, and for forty years active in the medical and cultural life of the growing city.

O. W. Fennel was graduated from the old Ohio Medical College, 1884, and did postgraduate work in the Universities of Heidelberg and Goettingen; was correspondent for the *Lancet-Clinic* which may be said to be the forerunner of *Journal A.M.A.* His papers on plague and tuberculosis, in 1884, are scholarly and sound.

Eric Fennel was graduated from the University of Cincinnati College of Medicine 1912; interned at the Jewish Hospital, served under J. H. Landis in the Health Department of Cincinnati; later in private practice in Winton Place, Ohio, during which time he did active duty in recruiting as a reserve officer of the U. S. Army.

In 1917 he was graduated from the Army Medical School as a lieutenant and at once put on duty in the laboratory, under Colonels Whitmore and Russell, working on vaccines for typhoid, pneumonia, and cholera. On March 17, 1919, he was promoted from lieutenant to captaincy, and after a ten-minute wait to a majority. In September, 1919, he came to Honolulu to take charge of the Department Laboratory in old Tripler Hospital.

He resigned August, 1920, and in September, 1920, with four associates founded The Clinic, now known as the Straub Clinic.

In that year too, with the help of a part-time assistant, he started a laboratory in the cellar of The Queen’s Hospital and was for many years

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Hawaii Academy of General Practice

The future of the profession may seem rather grim to those of us who have been in practice for some time.

Not having the naivete nor the boundless enthusiasm of the recently trained medical graduate, we focus on the coming restrictive aspects of "government medicine." Maybe the young see the future more clearly than we do—a sort of utopian professional practice free of concern over making a living out of it (many will be on salary), free of worry over overwork (they'll have regular eight- or six-hour shifts), free of intolerable responsibility (there'll be team care, of course), and free of scut-work and record-keeping (automation will be the thing). We wish them a bon voyage on the new course. The Ship of State has THAT kind of an HEW crew.

We oldsters have a sense of foreboding, however, that the future practice of government-sponsored "comprehensive," "team care," "automated" medicine may not go as smoothly as the planners project it. The people—the consumers—the patients, in fact—may balk at the system.

It is easy for the government to exhort the people to demand what Dr. Dwight Wilbur has labelled "Quality Medical Care"—prompt availability of well-trained physicians, who will express a personal interest, and at reasonable cost. Government speaks of this as a right rather than a privilege. It is a big order. It is, in fact, an order for pie à la mode, on a silver platter, served immediately if not sooner, and for only a nickel!

How does anyone in his right mind think this great country, wealthy as it is, can afford Vietnam, Foreign Aid, NASA, and the rest, AND try to guarantee every citizen such luxury fare?

We in HMA have recently heard Labor express the view that "the consumers" can be given this rich pie diet—by reducing the wages of the providers of services, particularly doctors.

We have discovered, incredibly, that Management has a similar attitude: that cures can be effected by cheaper drugs; that the sick should be sorted like laborers—those fit for full duty and those who should be pensioned off as worthless; that medical care can and should be mechanized.

We have been appalled and saddened by the display of ignorance on the part of both Labor and Management—the spokesmen for the consumers. We in HMA hope to be able to dispel that ignorance, but the grimness of the future lies in the enormity of the task ahead. If they don't see it like it is, on their own, how can we open their eyes?

So... what course should physicians pursue while all these new ideas and tricks of comprehensive medical care go through the mill?

We've said it before and we'll say it again to our colleagues:

- Practice good medicine (not just "the best I know how": that is no longer acceptable);
- Keep the interests of your patient foremost when you make your medical decisions;
- Do for your patient what you would have your colleague do for you if you were the patient;
- Weigh carefully in the balance lifesaving versus costsaving, ignoring neither;
- Satisfy your patient primarily, and you need satisfy no one else, not even the URC.

Fulfill these few criteria of honest, good medical practice, and you can then say to hell with any and all third party intervention. You need not be afraid to charge whatever your good services are worth—not to you but to your patients; they'll soon enough let you know if you overrate yourself. If they value your services, they'll beat a path to your door, and the path will be strewn with the wreckage of computers and with torn-up "medical plans."

J. I. FREDERICK REPPUN, M.D. ■



Tatsuo Watanabe, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
ORTHOPEDICS

Keio Gijuku University—1958
Internship—Keio University Hospital—1958-1959
Kuakini Hospital—1959-1960
Crawford W. Long Hospital—1960-1961
Residency—Charlotte Memorial Hospital—1961-1965
University of Pennsylvania Graduate School of Medicine—1963-1964
University of Pennsylvania Graduate Hospital—1965-1966



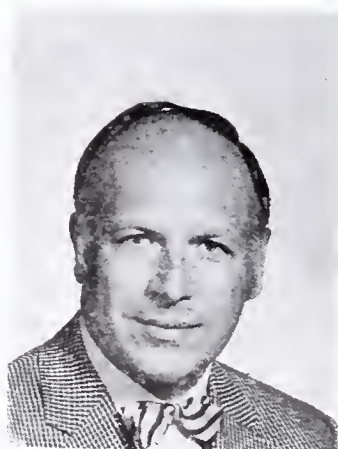
Robert W. Noyes, M.D.
3675 Kilauea Ave.
University of Hawaii
Honolulu, Hawaii 96816

OBSTETRICS & GYNECOLOGY
University of California School of Medicine—1943
Internship—Johns Hopkins Hospital—1944
Residency—Stanford University Hospital—1950-1951
Stanford University Hospital—1949-1950
San Francisco General Hospital—1945-1946
University of California Hospital—1944-1945



Sigdian S. Lim, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
OTOLARYNGOLOGY

University of Santo Tomas—1953
Internship—University Hospital, U.S.F., Manila—1952-1953
Residency—Kings County Hospital—1954-1957
Long Island College Hospital—1957-1958
Kings County Hospital—1958-1960



Argyl D. Bacon, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
ORTHOPEDICS

Indiana University—1950
Internship—Indiana University—1950-1951
Residency—Northwestern University—1954-1959



James L. Erickson, M.D.
407 Uluniu Street
Kailua, Hawaii 96734
FAMILY PRACTICE

University of Minnesota—1960
Internship—The Queen's Hospital—1960-1961



Lester L. Bergeron, M.D.
839 South Beretania Street
Honolulu, Hawaii 96813
OTOLARYNGOLOGY

University of Oregon Medical School—1960
Internship—University of Oregon Medical School—1960-1961
Residency—University of Oregon Medical School—1964-1968

County Society News



Allan S. Takase, M.D.

305 Wailuku Drive
Hilo, Hawaii 96720

OBSTETRICS & GYNECOLOGY

University of Missouri School of
Medicine—1963

Internship—Wesley Medical Center,
Wichita, Kansas—1963-1964

Residency—Kapiolani Maternity
Hospital—1964-1967

Queen's Medical Center—1964-1967
St. Francis Hospital—1964-1967



Ben Lin Hom, M.D.

1697 Ala Moana Blvd.
Honolulu, Hawaii 96815

PATHOLOGY

New York University—1961

Internship—Queen's Hospital—1961-62

Residency—Queen's Hospital—1962-63
UCLA—1963-64

New England Deaconess Hospital—1964-65

Bispebjerg Hospital—1965-67

San Francisco VA Hospital—
January 1968-December 1968

Honolulu

Approximately 120 members were present at the May 6 meeting. The following new members were introduced: Daniel M. Baer, Abe Oyamada, Ruben P. Mallari, R. Reginald Patterson, and Arnold W. Siemsen.

Two students from the University of Hawaii presented a program entitled "A Crisis in our Universities." The physicians were asked to encourage their office assistants to attend the June seminars being held for them by the BME.

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Approximately 115 members were present at the June 3 meeting which featured two speakers, John C. Find, clinical psychologist who spoke on "Healing in Spirit," and Mrs. Ah Quon McElrath, social worker with the ILWU who spoke on "The Youth Drug Clinic—Another Aspect in Healing." The President announced that Dr. Walter Watt had replaced Dr. Livingston Wong as chairman of the Utilization Review Committee. Dr. Frederick Shepard invited the physicians to attend a stroke symposium on June 8.

Hawaii

There was no meeting in May.

~ ~ ~

A joint meeting with the Hawaii County Nurses' Association was held on June 19. A panel consisting of Anna Maria Brault, M.D., Col. Clothilde Bowen, Mrs. Shirley Hayashi, and Raymond Tamura, M.D., discussed "Differential Diagnosis, Treatment, and Legal Considerations of the Management of Acute Alcohol Intoxication." Because of a lack of a quorum, no business was conducted.

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The July 18 meeting was held at the Hilo Hotel. The guest speaker, Dr. Charles Kleeman, gave an interesting talk on "The Pathogenesis and Diagnosis of the Oliguric Syndromes." Dr. Allan Takase's application for membership was approved. Approval was voted for the proposed rubella project of the National Communicable Disease Center. It was announced that Dr. Richard Blaisdell will be the guest speaker at the August 15 meeting and he will be pleased to see hematologic cases in consultation. The status of the scholarship fund was referred to the Finance Committee and a report will be made to the membership at the August 15 meeting.

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Drs. Richard Blaisdell and William Spies were guests at the August 15 meeting. Dr. Blaisdell presented an interesting discussion on the "Systematic Approach to the Anemic Patient."

During the business meeting it was announced that the Finance Committee would make a report on the Scholarship Fund in September. It was voted to defer action until September on the request of the Hawaii County Comprehensive Health Planning Committee for endorsement of fluoridation of public water and representation on the CHP subcommittee on fluoridation. The possibility of holding Society meetings in places other than Hilo was discussed. ■

COUNCIL MEETING

Mabel Smyth Conference Room

July 27, 1969

10:00 A.M.

PRESENT

George H. Mills, presiding; Drs. Batten, Chinn, Dang, Iaconetti, Jones, Lowrey, Miyashiro, Moore Sloan, and Tomita, plus Drs. DeJesus, Gilbert, Goebert, George Goto, Morris, Oren, Calvin Sia, K. S. Tom, Wakai, and Mr. H. Tom Thorson.

MINUTES

The minutes of the May 15, 1969, meeting were approved as circulated.

**NATIONAL ASSOCIATION OF
BLUE SHIELD PLANS**

A letter was directed to Dr. Donald N. Sweeny, Jr., regarding the April 15 NABSP release numbered EX-69-3A which contained the revised membership standards including the following: "A Plan shall have substantial support of the medical profession, evidence of which shall be approval of the Plan by the appropriate medical society or societies."

It was noted that HMSA has contacted some physicians to meet with them to offer a plan. The Maui physicians stated that HMSA has contacted their Society and that they will meet with them. The purpose of the meeting is to offer the Maui physicians a plan to compete with Kaiser. The Maui County Medical Society will submit a report to HMA after this meeting.

After considerable discussion regarding the status between HMA and HMSA and the bylaws of the NABSP, the chairman suggested that perhaps a letter should be directed to the AMA outlining the status between HMA and HMSA.

ACTION:

It was voted to write a letter to the AMA (Mr. John A. Rowland) over Dr. Mill's or Dr. Moore's signature outlining the present status between HMA and HMSA.

RELEASE OF FEE SURVEY STATISTICAL DATA

It was reported that requests have come from the Department of Social Services and the Veterans Administration for release of statistical data from the last fee survey. The DSS is requesting this information because one of the requirements of the new Federal regulation is based on establishing customary fees as of January 1, 1969. The Council was advised that the officers and staff want direction from the Council on this matter. There was considerable discussion about the type of statistical information being requested. Some members felt that these figures should be on a statewide basis rather than geographical. It was noted that in 1968 the House of Delegates adopted a resolution which states that preliminary figures may be released to the Foundation for Medical Care Board of Trustees and the Workmen's Compensation Committee of the HMA prior to the publication of the findings so that indicated adjustments may be made and supported. The resolution is silent on release to other organizations. It was also pointed out that if HMA does not provide data to the DSS and the VA for them to work with, they will have to conduct their own fee sur-

vey or go to other sources such as Aetna and HMSA. It was noted that if such data are released, only those statistics will be lifted out of survey which will help in negotiating an equitable fee schedule.

ACTION:

It was voted to refer this matter to the Commission on Medical Services in order that it may have dialogue with DSS. After dialogue has been completed, a summary is to be sent to each County Society for approval, after which the Commission on Medical Services will decide what information is to be released.

**AMA LETTER RE 12TH NATIONAL CONFERENCE
ON PHYSICIANS AND SCHOOLS**

The National Conference on Physicians and Schools will be held in Chicago at the Pick-Congress Hotel, October 8-11, 1969. The basic purpose of this meeting will be to interchange information about problems and programs of mutual interest. The invitation advised that there are many new factors to be considered and many special problems arising with respect to implementation of school health programs in today's environment.

ACTION:

It was moved and seconded to allow Dr. Roy Kuboyama, Chairman of the School Health Committee, to attend this meeting in Chicago and that the Council appropriate travel expenses for tourist passage and the usual per diem.

A substitute motion was made and passed with one dissenting vote. It was voted that since this meeting will be an annual one, that this be considered in next year's budget.

It was voted that all requests for funds for representatives to mainland meetings, other than AMA House of Delegates' meetings, be presented to the treasurer and that the officers make assignments for a priority system to determine which representative or committee member can attend.

LETTER FROM DR. ROBERT E. MYTINGER

Dr. Mytinger is requesting an endorsing letter from the President of the HMA for a Health Occupations Study Program. It was pointed out that there has been coordination of efforts between the Regional Medical Program-Hawaii, Comprehensive Health Planning, and University of Hawaii.

ACTION:

It was voted that an endorsing letter be sent as requested.

**LETTER FROM DR. RAYMOND DEHAY
RE MULTIPHASIC SCREENING**

Dr. deHay's letter requested the position of the HMA on multiphasic screening and the future of multiphasic screening in Hawaii. Dr. Gilbert was asked to inform the Council about the multiphasic screening program at Straub. After concluding his presentation, Dr. Gilbert extended an invitation to anyone interested to see the operation. It was noted that there has not been enough experience in this field for the HMA to take a stand on Dr. deHay's request.

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★**Clinical Electroencephalography of Children, Vol. 11**

Edited by Peter Kellaway and Ingermar Petersen, 332 pp., \$16.75, Grune & Stratton, 1968.

THIS COLLECTION of papers was presented at a conference in August, 1967, in Goteborg, Sweden. The individual papers, are by outstanding French, Scandinavian, Russian, German, English, and American clinical and research electroencephalographers. The title certainly suggests a text book; this it is not. However, all but two of the articles are based on work with human subjects.

Taken as a whole the book does give a fairly well-rounded picture of pediatric electroencephalography. It covers a large number of the important problems in diagnosis and prognosis along with excellent descriptions of activating techniques, pitfalls in diagnostic technique, as well as covering a fair part of the spectrum of abnormalities such as paroxysmal activity, spike foci, the different forms of syncope, lipidoses, dyslexia, the 14 and 6 per second positive spike, low birth weight children, and the surgical treatment of focal epilepsy. The papers individually are uniformly excellent and eminently readable, however, they all require a fairly sophisticated background in electroencephalography on the part of the reader.

This is not at all a basic book in electroencephalography of children. It is for the EEG specialist, although there are many gems and pearls which would be of great value to any pediatrician, neurosurgeon, or psychiatrist. The illustrations, figures, and tables are excellent. The articles by foreign authors read as if they had been written in English, with rare exceptions.

I would highly recommend this book for all neurologists and electroencephalographers.

JORDAN S. POPPER, M.D.

Cerebral Vascular Diseases

Transactions of the Sixth Conference Held Under the Auspices of The American Neurological Association and The American Heart Association, 280 pp., \$8.75, Grune & Stratton, 1968.

THIS is an excellent presentation of interesting material and concepts of the physiology and pathophysiology of the cerebral vascular system and cerebral vascular disease. Recommended reading for an increased understanding of the pathogenesis and management of cerebral vascular disease.

RAYMOND CHOCK, M.D.

Female Urology

By Houston S. Everett, M.D., and John H. Ridley, M.D., F.A.C.O.G., 238 pp., \$10.50, Hoeber Medical Division, Harper & Row Publishers, 1968.

THIS TEXTBOOK is not intended as a complete reference book for the specialty of either gynecology or urology, but both can benefit from these ideas and suggestions for examination and treatment of common urological disorders in the female.

It is an excellent introduction to urology for the gynecologist particularly. It might also be considered a very good introduction to gynecology for the urologist. The overlapping areas in these fields can thus be more appreciated by each specialty.

S. J. BUIST, M.D.

★ means highly recommended.

Bray's Clinical Laboratory Methods, 7th Ed.

Revised by John D. Bauer, M.D., Philip G. Ackerman, Ph.D., and Gelson Toro, Ph.D., 764 pp., \$14.85, The C. V. Mosby Company, 1968.

THIS is a revised edition of a textbook covering virtually the entire field of clinical pathology, plus sections on toxicology and histology. It is impossible to cover laboratory medicine in depth in less than 800 pages. The book could easily be criticized by any pathologist depending on his particular area of interest. Automation, for example, takes up only four of 154 pages devoted to clinical chemistry. It is recognized, however, that the authors' aim is to present basic principles as opposed to new developments. The text has no outstanding strengths, but neither does it contain glaring faults.

It can be recommended to medical students, medical technology students, and those desiring a rapid review of traditional laboratory medicine. It will not suffice for the specialist or as a reference work.

BEN LIN HOM, M.D.

Also Received

William Henry Welch and the Heroic Age of American Medicine

By Simon Flexner and James Thomas Flexner, 539 pp., \$3.00, Dover Publications, Inc., 1968.

A PAPERBACK biography of this "dean of American medicine."

**Alcohol and the Impaired Driver:
A Manual on the Medicolegal Aspects of
Chemical Tests for Intoxication**

Committee on Medicological Problems, 234 pp., \$150, American Medical Association, 1968.

MEDICOLEGAL aspects of this problem are fully discussed.

Human Labor and Birth, 2d Ed.

By Harry Oxorn, B.A., M.D., C.M., F.A.C.S., F.R.C.S.(C), and William R. Foote, B.A., M.D., C.M., F.A.C.S., F.R.C.O.G., F.R.C.S.(C), 588 pp., \$8.50, Appleton-Century-Crofts, 1968.

AN EXCELLENT, well-illustrated monograph on normal and abnormal birth and its management. Recommended for the house staff and general practitioners for study and review.

★**Scientific Writing**

By Lester S. King, M.D., and Charles G. Roland, M.D., 132 pp., \$1.00, American Medical Association, 1968.

AN EXCELLENT, concise, and inexpensive paperback which should be on the desk of all who contemplate any form of scientific writing.

The Physician and the Law, 3d Ed.

By Rowland H. Long, LL.M., 433 pp., \$9.50, Appleton-Century-Crofts, 1968.

A REVISED EDITION which may serve as an invaluable reference source for the practicing physician. ■

Life in These Parts . . .

The tale is oft repeated by Tom Thorson, Honolulu County Society executive secretary, of how **Fred Nanee** took a mighty swing on the 14th tee at Pali Golf Course one memorable Wednesday afternoon. With a fateful snap! Fred's belt broke and his Bermudas came down around his ankles. Undaunted, Fred forthrightly removed his jock strap and used it to suspend his shorts while he finished the 18. (Code of conduct, Rule No. 1: A physician is prepared for any exigency and meets it calmly, courageously, and expediently.)

Eye man **Tom Frissel** and ENT man **L. Q. Pang** bantered each other during the Medicare Review Committee meeting over the issue whether or not an ophthalmologist should be compensated for complications occurring during eye surgery. Lup was defending the charge and trying to say, "When we have a retrobulbar hemorrhage, we lose a lot of *sleep*," but our ever-alert chairman **Bill Dang**, who had been looking thoughtfully at Lup's thinning dome, quickly interpolated "hair" before Lup could say "sleep."

During the ETV planning meeting, Moderator Gordon Burke suggested there be a trophy award for the year's best program. **Rowlin Lichter** suggested "The Silver Tongue Trophy," but Cesar De Jesus, remembering how the programs on sex were always popular, recommended "The Hymen Trophy." (Television's counterpart of the Heisman Trophy.)

We received this quite explicit camp notice from the recreation center where our eight-year-old son was attending the summer fun program. "Do not bring naughty children, spears or knives, and fishing poles or hooks." In bold italics it also said, "Parents are *not* welcomed to visit the camp. This camp is for children only."

We bristled into the medical record room after receiving our familiar "Please complete your charts by . . . or else" notices, but before we could complain about the picayunish chores dreamed up by the record room staff, we were placated by a sign on the wooden plaque hanging on the wall, "KWITCHUR-BELYAKIN."

Confrontation with Management (They came, they conquered)

As a logical sequel to our meeting with Labor, we met with Management on August 12. Management representatives were generally sympathetic and understanding, and had some insight into our problems. But

they still had the problem of increased cost of medical care on their hands, and were trying to find solutions. Mitsuyoshi Fukuda, vice president for industrial relations at Castle & Cooke, pointed out that management was concerned with three primary areas of cost, namely, the cost of physical examinations, both preemployment and annual; the cost of medical care plans; and the cost of lost time from illnesses and accidents on and off the job. With regard to estimated sick and compensated leave time, he grumbled, "Doctors will not talk to us . . . We can not get a response." He also wondered if drug costs could be reduced by using generics, if costs could be cut in our offices by more economy of facilities and overhead, and if the time spent by their employees in physicians' offices could be reduced.

Donald Nicholson, American Factors vice president, prefaced his talk with "Anything I say is in a constructive vein and without malice." He pointed out that of all the fringe benefit costs in his company, medical costs were the highest per capita, to the tune of over \$5 million total last year. He felt that plantations could not go on fee-for-service or private physician care. He suggested, "We must have better communication between different groups and better understanding of individual problems . . . We must be thinking of better ways to do the job . . . Perhaps we can contract directly with groups without the insurance carrier . . . We know that insurance carriers take 10 per cent of every dollar spent on medical care . . ."

Robert Grunsky of Hawaii Employers Council was the third panelist. Bob explained that "management has had to change its attitude towards medical care costs because it is becoming a major share in our cost of doing business . . . It is not a local problem only . . . The burden of medical care has shifted to management and management attacks any cost problem which becomes a major factor . . ." He warned, "Doctors have been fighting socialized medicine and management has always been on their side . . . Doctors may now be losing their ally . . ."

We were embarrassed during the question-and-answer session that followed by the many irrelevant and hostile questions. One physician asked, "Mr. Fukuda, are all brands of sucrose the same, generically?" Another offered, "We may be offering substandard medicine by doing what you propose." Another popped up with "Mr. Nicholson, are you against small business?" Still another expressed the opinion that he should have quit in 1948. A panelist retorted, "Any physician in dire straits want to comment on that?"

HOEI HIGA, M.D.

Hoei Higa was born on July 8, 1908, in Olaa, Hawaii. He received his medical degree in 1937 and his Ph.D. in immunology in 1944 from Tokyo Jikei-Kai School of Medicine in Tokyo, Japan. He interned at St. Luke's Hospital in Tokyo and then took an obstetrics residency at Doai General Hospital. Dr. Higa was also an assistant

administrator of Hagiwara Hospital in Saitama-Ken, Japan, until his return to Hawaii. Upon his return he affiliated with St. Francis Hospital in Honolulu. He practiced in Hilo, Hawaii, from 1950 to 1954 and moved back to Honolulu in 1955. He is survived by his wife, Natalie Fumie, and two children, Meiri and Palmer.

NAOMITSU TAJIMA, M.D.

As physicians we are supposedly trained to listen to patients' complaints, analyze these complaints, draw conclusions, and treat. Yet, here was a group of consumers registering their complaints and we seemed to lose our objectivity, and our professionalism and stop listening. Perhaps this is what Bob Grunsky meant by "We must bridge the gap of attitude. . . ."

Conference Humor

A 47-year-old man with pulmonary infarction and cardiogenic shock who was a two-pack-a-day smoker before his demise was being discussed during a Queen's conference. Medical director **James Orbison** wondered about the high hemoglobin without the usual history of lung disease. Panelist **Phil Jones** was quite confident. "Of course! He was a heavy smoker," and looked casually askance at fellow panelist **Ed Chesne** who usually has a cigarette dangling from the corner of his mouth. Ed grimaced painfully. . . .

Psychiatrist **Lowell Wiese** discussed criterion questions for IQ testing, such as age differentiation, scholastic ability, contrasted groups, etc., during a Monday noon Children's Hospital lecture. In his enthusiasm, he forgot about the allotted time and had to postpone the conclusion of his talk to a later date. **Walton Shim** moseyed up after the lecture and asked if the ability to keep track of time has any correlation with intelligence.

At his next lecture, Lowell was discussing the Peabody tests and commented ruefully that "the revealing thing is that it tests one's own intelligence. I've given these tests a trillion times and yet I can never remember the answers to some of the questions."

Visiting Physicians

K. Alvin Merendino, a greying handsome figure with horn rimmed glasses and a weight lifter's physique, was the visiting professor of surgery from the U. of Washington Medical School. Alvin, who characteristically speaks out of the right corner of his mouth, gave excellent didactic lectures, replete with beautiful color slides. Regarding valve transplants, he concluded, "In our series, the pig most closely approximates the human. . . ." (Judging from the gluttonous appetites of some of our fellow physicians, we feel that perhaps it should be restated that humans most closely approximate the pig.)

The visiting professor of surgery for August was **Marshall Orloff** from UC Medical School. This youngish, pleasant-featured surgeon with a friendly smile reviewed basic fundamentals and spewed a continuous stream of statistics and facts. Regarding breast cancer, he admits that after a radical, he finds it difficult to recommend a prophylactic simple mastectomy in the other breast because women attribute so much of their sexuality to their breasts. When questioned about the varying statistics on different modes of treatment, he

continued page 72

ROGERS LEE HILL, M.D. 1905-1969

Rogers Lee Hill was born July 2, 1905, in Glen Allen, Alabama, and died unexpectedly of a heart ailment at his home in Honolulu, June 29, 1969.

Dr. Hill was the son of Dr. Robert Leroy Hill and Mary Orlena Lee Hill. He received his A.B. degree from Birmingham-Southern College in 1926, and his M.D. from Vanderbilt University Medical School with honors in 1930.

He served his internship at Vanderbilt University and completed his surgical residency there in June, 1933.

He accepted a position as locum tenens at Lihue Plantation on Kauai in September, 1933. While there he met Eunice Hyde Wilcox. They were married on March 27, 1934.

Following completion of his service on Kauai he moved to Honolulu and opened an office in the Young Hotel Building to practice surgery. He joined the Honolulu County Medical Society in September, 1935.

During the first few years in practice Dr. Hill devoted considerable time to the training of The Queen's Hospital surgical house staff. During this period he performed the first pulmonary lobectomy done in Honolulu.

When World War II began Dr. Hill and the staff handled the civilian casualties at The Queen's Hospital that resulted from the attack on Pearl Harbor and Honolulu. Later he served in the U.S. Navy as a Commander in the Hawaiian and Philippine theaters of operations. Following his discharge from the Navy in 1946 he resumed his surgical practice in Honolulu. During this period he conducted weekly surgical conferences for Queen's attending and house staffs. He was always able to add additional stimulation to these conferences by using current and historical anecdotes. These conferences were always well attended and he continued them during the entire time he remained in private practice.

Dr. Hill was an avid student of medical history and an exponent of good surgical technique, and

these added considerable interest to the quality of his surgical conferences.

In 1948 Dr. Hill was elected president of the Honolulu County Medical Society. In 1950 he was the youngest president of the Hawaii Territorial Medical Association.

This same year he published a monograph on the treatment of burns, which received national recognition. He was also elected president of the Medical Advisory Committee to the Territorial Senate holdover committee, to study a statewide indigent medical program.

Dr. Hill was a fellow of the American College of Surgeons and was elected President of the Honolulu Chapter in 1968.

He was a founder and past president of the Hawaii Surgical Society. He also was the founder and first president of the Hawaiian Society of Medical History. Dr. Hill served for many years in an advisory capacity to the Hawaii Medical Library.

Dr. Hill was a diplomate of the American Board of Surgery and a founder member of the American Board of Thoracic Surgery.

In 1963, following the death of his wife, Eunice, Dr. Hill returned to his native Alabama to settle some personal business affairs. Two years later he returned to Honolulu and was chosen to be the coordinator of the Integrated Surgical Program at Queen's, St. Francis and Kuakini Hospitals, a position he occupied until his death. He was appointed clinical professor of surgery at the newly founded University of Hawaii Medical School.

Dr. Hill made many fundamental contributions to surgery in Hawaii. His unselfish enthusiasm inspired the many young doctors he helped to train. The frequent testimonials he received were merely a token appreciation of his efforts.

Dr. Hill is survived by two sons, Rogers Lee and Robert Scott, and two daughters, Martha Lee and Mary Ann.

The Medical Library will dedicate its section of medical history to his memory.

HENRY C. GOTSHALK, M.D.

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—Current Therapy 1967, ed. by Conn, H. F., P. 88—

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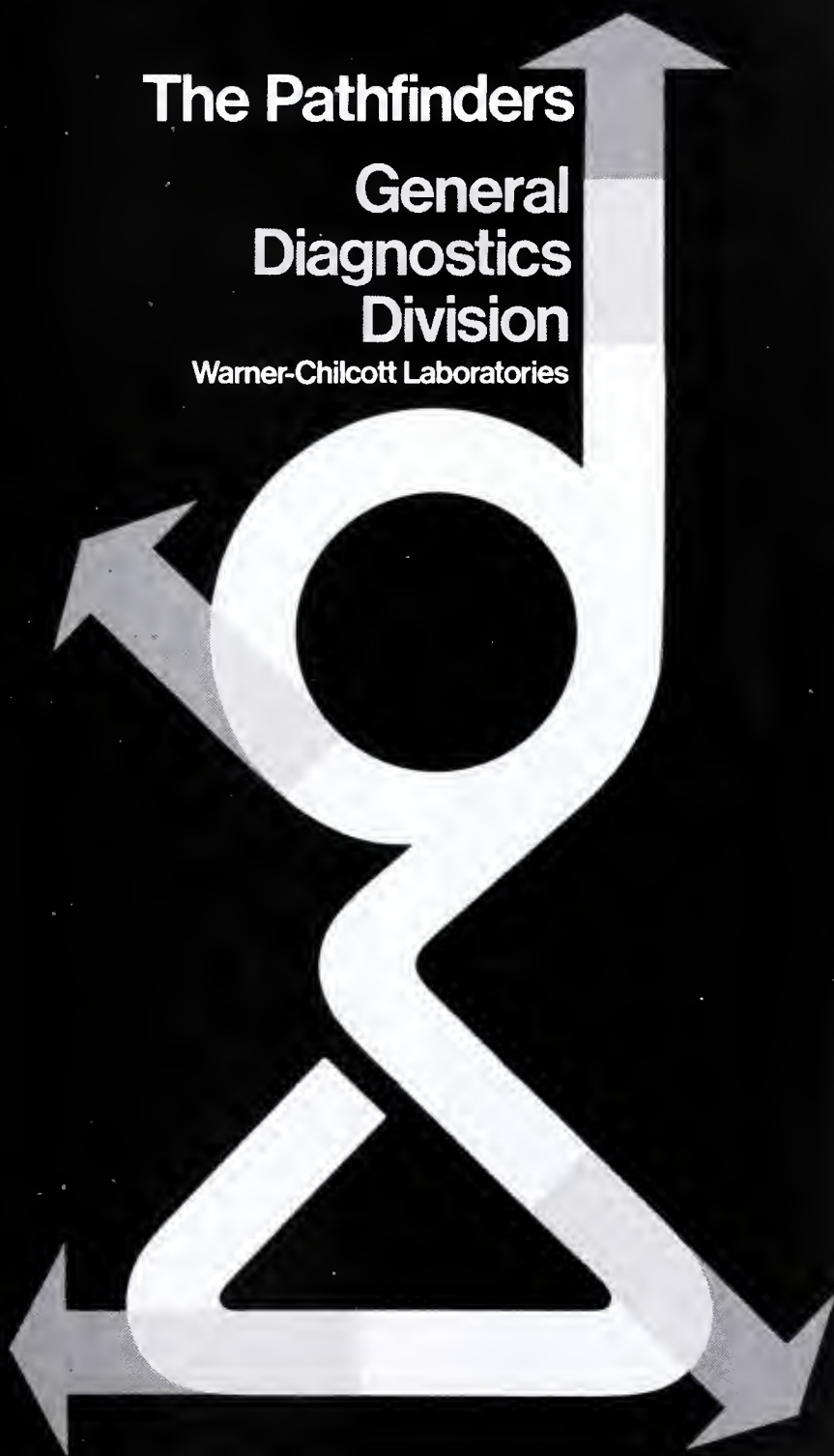
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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: EDITH G. EKSTEIN, MT(ASCP), U. S. Army Tripler General Hospital

Convention Reports

Following are reports submitted by Betty Hughes and Edith Eckstein, two of the three delegates representing Hawaii at the 37th annual convention of ASMT held in Philadelphia, June 22-27. Louis Wulff's report will appear in a later issue.

MRS. HUGHES REPORTS

The Presidents' Council: The first council, held on the Sunday before the convention officially started, was formed by the presidents and presidents-elect of all the state societies for 1968-69. Edith Eckstein (as a proxy for James Yano) and I attended. It was quite an improvement over the previous council that I had attended in 1962. Although the complete agenda for the House of Delegates was reviewed, matters that might come up for debate were assigned to be studied by reference committees. Any new matters to be brought before the House must also be first introduced at this time, including any nominations from the floor. Although Edith and I knew what was coming, we were pleased and proud when the Arizona representatives nominated Louise Wulff for Region X Director.

For anyone attending as an official delegate, it was almost a necessity to attend the reference committee meetings. This is where all the debating and explaining of the items to be voted upon take place. This is where a real understanding of the whole society structure and workings can be gained, and where a meaningful vote can be formulated. Because all three of your delegates attended these committee meetings for several hours during that week, I feel that we voted on issues with much better understanding.

The council again met at the close of the convention, but was represented by the incoming (1969-70) officers of the state societies. Louise (as a proxy for Mary Connor) and I attended that tired Saturday. Our new ASMT president, Roma Brown, introduced the new officers, passed out an organizational sheet, which explained the structure of ASMT, and then introduced her new committee chairmen. Each of the chairmen took time to explain the purposes of his committee and the plans and goals for the coming year. You can rest assured that your national dues will be spent

wisely, if the high caliber of the various chairmen is any indication.

Scientific Assembly, Chemistry: The assemblies were purposely scheduled to meet simultaneously. What an ingenious way of getting people to really state a choice! Since each assembly needed 25 signatures on a petition in order to continue, some groups may have had a hard time of it. The chemistry section had no trouble, unless it was to find enough chairs for all present. Since the assemblies are just now in the formulating period, no concrete plans have as yet emerged. Each group may eventually be responsible for helping with its portion of the national convention, getting speaker rosters for its own specialty, starting traveling seminars, publishing book and article reviews, etc. The possibilities are endless. The next time you sign your renewal for membership, give a little thought to the area marked for the scientific assemblies, and check off your primary interest or interests. This will help the ASMT plan future programs according to representative interest.

Region X: The regional concept is now a fact, and no longer simply a plan for the future. What each region desires to make of itself is still in the planning stage. As a partner in Region X, Hawaii will be meeting and planning with Arizona, California, and Nevada. Because Hawaii and Alaska have transportation costs far exceeding those of the other states, the ASMT voted to split the expense of sending one council member (or proxy) to no more than two regional meetings a year. The council members are the presidents and presidents-elect of the four states involved, and nonvoting members include the regional director, Annamarie Barros; the Region X nominations committee member, Gerald Sandell; the Regional judicial council members, Miss Barbara Isbell and Mrs. Jeanne Schlafman; the Board of Registry representative, Mrs. Lois Matheson; and the membership national chairman, Mrs. Nancy Pruess. There were two meetings held for Region X, a brief one directly following the closing of the House of Delegates on Friday, and a longer one held on Saturday afternoon following the presidents' council. A meeting has been planned for Saturday, November 8, to be held in Torrance, California. Sometime between now and then, I hope to assemble a series of questions for you, the

membership, to answer. Start thinking NOW on what you want our region to do for you, or vice versa.

Presidents' Dinner: One of these days Hawaii may find itself in quite a predicament when BOTH the president and the president-elect decide to attend the same national convention. Up until now, the president has very courteously passed on her invitation to the president-elect to attend the annual State Presidents' Dinner, hosted by Coleman Instruments. It would be a shame for either one to miss it. This year's dinner meant getting into Philadelphia early enough to attend the Saturday event. Not only are all the state society presidents invited, but also national officers and all of the former ASMT presidents. Many of Hawaii's friends were there—friends that we made during our post-convention of 1961. In such an atmosphere, who could help but have a wonderful time? The congenial crowd and the delicious food made for an unforgettable evening.

I am deeply grateful to the HSMT membership for my trip and the privilege of representing Hawaii. About the only thing to mar my memories of Philadelphia was the haze that obscures the sun, starting from about the Mississippi River and getting worse the farther east one goes. With the exception of the L.A. area, the western skies were crystal-clear, but the eastern skies are in a sad state. As I took off on the Sunday following the convention, I remarked to a fellow passenger that the sky looked unusually bright that day. It came as quite a shock to learn that the sky always looks better on Sunday, because all the factories and plants are shut down for the weekend, and there are fewer cars on the road. It really makes one stop and think, and appreciate Hawaii all the more, but also wonder how long before Hawaii, too, will be smog-bound.

MISS ECKSTEIN REPORTS

My first general comment on ASMT Conventions is that they are now too big for delegations of only three persons. It forces one to choose between superficial attention to many things and careful attention to a few things. Neither is entirely satisfactory, but in either case there is no time to become bored. Following are my reports on four features of the meeting.

The Exhibits: Visiting exhibits was not representing HSMT, and though it was regrettable, we spent very little time in the exhibit area. Close to 300 exhibitors provided excellent displays of the latest equipment and reagents. There were plenty of manufacturers' representatives on hand to demonstrate and explain.

There was an abundance of descriptive literature, catalogues, and price lists available along with souvenirs of every type imaginable—including freshly cut, long-stemmed red roses. (I never

did learn their importance in the medical laboratory!) One of the things I brought home was an impression—unconfirmed by information—that more MT's than ever before are now employed as sales representatives.

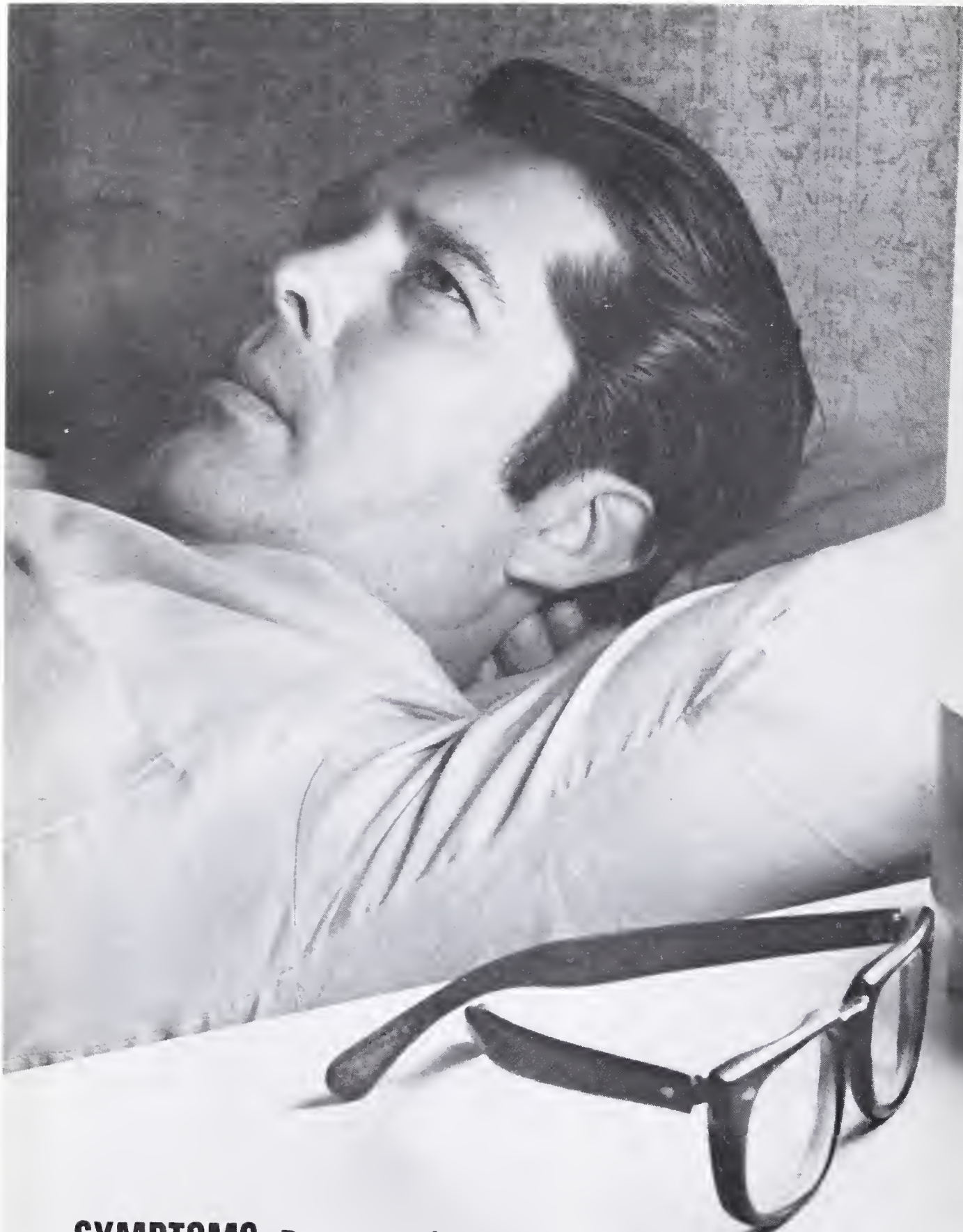
The Election: Results have already appeared in the *ASMT News*, but since Hawaii was involved in several special situations a few words are in order. For the first time, a candidate from Hawaii ran for a national office. Louise Wulff was nominated from the floor by Arizona (Nancy Preuss made the nominating speech) for Region X Director. (Region X is comprised of Arizona, Nevada, California, and Hawaii.) The subsequent three-way election resulted in the failure of all three candidates to win a majority of the votes. A run-off election on the following day resulted in Annamie Barros of California winning over Louise by ten votes.

Before the election, Hawaii's delegation joined with the Arizona group in a "Meet-the-Candidates" coffee hour. That Region X neighbor, however, didn't fare any better than Hawaii as Mary Lee Seacat from Phoenix lost to Gerald Sandell of California for Region X's position on the Nominating Committee.

We were sorry that we couldn't swing the six votes that would have elected Louise but we left Philadelphia confident that Annamie and Gerry will be responsible and responsive representative of our Region.

The ASMT Law Suit: The suit which ASMT filed in May against the ASCP has been so well explained in letters from Houston and in *ASMT News* articles that no explanation is needed. I'd like to report, though, that the suit received virtually unanimous support from the House of Delegates. There is a pervading feeling of regret that the situation reached the impasse which necessitated the law suit. There is also disappointment and disillusionment of a more personal sort in the reactions of all Med Techs. Required reading: "Just One Big Happy Family" by Dr. William K. Seldeu in *The American Journal of Medical Technology* for last June.

Scientific Assemblies, Serology and Immunohematology: This assembly was organizational in nature and was anything but a coordinated scientific group of people. It is probable, though, that it, together with those in the various other subspecialties, will be responsible for the scientific programs that will be presented at future ASMT Conventions. Before next year's meeting, the Serology and Immunohematology Assembly hopes to have a clear outline of the subjects which will be studied and reported by its members. It appeared that Immunology would require consideration separate from Immunohematology. Serology (as represented by syphilis serology) is apparently going to be a separate subsection all by itself. Next year's meeting should be better. ■



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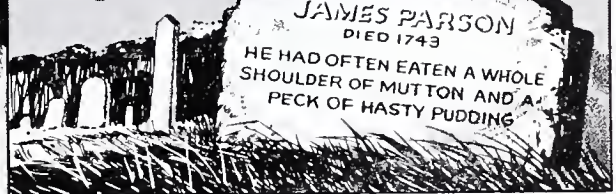
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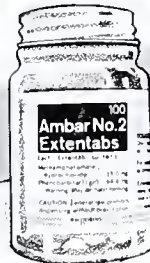
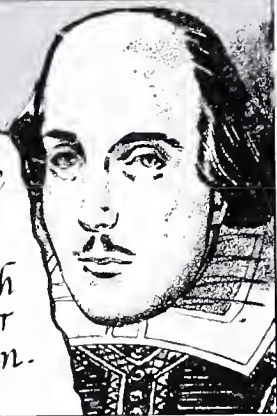
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HE WROTE...

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leave gormandizing;
Know thy grave doth
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ACTION:

It was voted to have an ad hoc committee study this and report back to the Council with its recommendations.

The president suggested that the Bureau of Planning and Research be charged with this.

REPORT OF THE SECRETARY

The secretary's report was circulated and reviewed.

ACTION:

It was voted to accept the Secretary's report as circulated.

REPORT OF THE TREASURER

The treasurer's report was circulated and reviewed. Several questions were asked regarding various accounts. The HAMPAC account was questioned because of its being a political program. However, it was pointed out that the HAMPAC account is used for educational purposes; e.g. brochures, flyers, etc., to physicians.

ACTION:

It was voted to accept the treasurer's report as circulated.

REPORT OF THE COMMISSIONS AND COMMITTEES

Commission on Education and Research: The report was noted.

ACTION:

It was voted to accept the report of the Commission on Education and Research as circulated.

Commission on Internal Affairs: Dr. Wakai asked Dr. Sloan, Chairman of the Arrangements Committee, to give a progress report on arrangements for the 114th Annual Meeting. It was reported that the scientific program is just about complete. The meeting has been moved up one day because of a mix-up of dates. It will now be held on May 5-8 with the annual banquet on May 9. The meetings will take place at the Hilton Hawaiian Village. It was pointed out that the HMA will have to pay a rental fee of \$500 a day at the Hawaiian Village and it was noted that all convention facilities are now charging in the area of \$500. There was discussion of raising the exhibitor's booth rental from \$150 to \$250.

ACTION:

It was voted to set the exhibitors' fee for the annual meeting at \$250.

Dr. Wakai reported that the House of Delegates approved the dates (May 2-8) for the 1971 meeting to be held at the Princess Kaiulani Hotel. The Council was advised that these dates are not available at the PK or at the Hawaiian Village. However, the PK is able to confirm reservations for May 19-22, 1971. The Council was asked to take action on this matter since bookings are getting tight.

ACTION:

It was voted to confirm reservations with the Princess Kaiulani Hotel for May 19-22, 1971.

There was discussion on charging \$5.00 registration fee for members of the HMA. It was noted that the non-members are charged \$50.00. It was further noted that

continued page 64



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the House of Delegates voted not to have a \$5.00 registration fee for HMA members because of the increase of membership dues. No action was taken on this matter.

There was discussion about the breakfast at the scientific meetings. It was pointed out that breakfast at the Hilton is quite expensive and the Arrangements Committee feels the breakfast should be deleted.

Dr. Moore brought up the matter of the publicity on the relationship between the drug houses and organized medicine. He felt that the HMA should look into the matter of accepting contributions from the drug houses to support the annual meeting.

There was also some discussion on the possibility of holding an annual meeting on Maui or Kauai even though the House of Delegates did vote on not having an annual meeting on the neighbor islands until their facilities are adequate. This matter will be discussed further.

Commission on Legislation: The report was noted.

ACTION:

It was voted to accept the report of the Commission on Legislation as circulated.

Commission on Medical Services: The Commission's report was reviewed. Action on the Commission's recommendation relative to the release of statistical data was taken earlier in the meeting. No further action was taken.

Commission on Public Health: The chairman reported that a decision is being reached on the feasibility of setting up a pilot study of rubella vaccine and its long-time immunity. Dr. Chun, Chairman of the Communicable Disease & Immunization Committee, is following this through. Dr. Iaconetti stated that the Maui County Medical Society had accepted the proposal made by the Department of Health. Dr. Jones said that he was under the impression that Hawaii county was not included.

It was pointed out that Mr. Hugh Lytle is handling the publicity for a joint committee on rubella vaccine. This matter will be followed up by the Public Relations Committee.

The positions of School Physician and Health Aides are being studied as the Legislature has created these positions. The chairman of the School Health Committee is pursuing this with Dr. Quisenberry. The Chairman of the Commission recommended that the HMA suggest to Dr. Quisenberry that HMA be actively involved in the appointment of the School Physician for the public schools.

ACTION:

It was voted that the President of HMA write a formal letter to the Department of Health to request that the HMA be actively involved in reviewing applicants for the position of School Health Physician.

The Council was requested to endorse the concept that a Child Abuse Center be developed in a medical setting, that child abuse is a medical problem as well as a social problem, and that medical leadership is of utmost importance.

ACTION:

It was voted that since child abuse is a medical problem as well as a social problem that physicians become actively involved in developing a Child Abuse Center in a medical setting.

Commission on Interprofessional and Public Relations: The Commission's report was reviewed. The following recommendations were acted upon.

(1) That the Council strongly support a health professions career day program to be primarily organized by the Woman's Auxiliary. Dr. Goebert pointed out that the Woman's Auxiliary is willing to take on this project. However, they will need financial support since there

continued page 66

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will be a need for secretarial help, printing, rental of a hall, etc.

ACTION:

It was moved to appropriate \$500 for this project and that the Commission on Public and Interprofessional Relations attempt to pursue additional methods of financing for this project outside of the HMA; e.g., Foundation grants, RMP, CHP, etc.

The motion was passed with one dissenting vote by Dr. Tomita.

(2) That there be continued expansion of Operation Pacific. It was pointed out that Samoa is again calling for help from the physicians. The Chairman felt it is important that we maintain a good working relationship between the Hawaii physicians and the people of the Pacific Basin.

ACTION:

It was voted that there be continued expansion of Operation Pacific.

(3) That there be continuation of programs with interested lay leaders in the socioeconomic sphere of medicine.

ACTION:

It was voted to accept the recommendation that there be continued programs with interested groups in the socioeconomic sphere of medicine.

REPORT OF THE BUREAU OF PLANNING & RESEARCH

The Bureau's report was noted.

ACTION:

It was voted to accept the Bureau's report as circulated.

REPORT OF THE FINANCE COMMITTEE

No report was submitted by the Finance Committee chairman since the committee had not met.

UNFINISHED BUSINESS

Management Consultant Services: Dr. Lowrey reported that proposals from Rothrock, Reynolds and Reynolds, Inc., and New Management Center were received and circulated to the Council. He pointed out that the letters are self-explanatory. He reported that the officers have discussed these two proposals and find that the HMA would be investing a lot of money to go into this matter extensively and the officers felt at that time that it would be better to postpone this matter for the present time.

Correspondence from Dr. Frissell: Dr. Frissell's letter in regard to the establishment of a Public Affairs Department was noted. No action was taken.

Implementation of Resolution No. 14 re Community Health Planning: It was reported that Resolution No. 14 was adopted by the House of Delegates and the resolve reads as follows: "That the House of Delegates direct an ad hoc committee be formed to establish guidelines for the approval or disapproval of the delivery of health care services through governmental facilities and the expansion of such facilities such as the following, but not limited to the example facilities: Waimanalo Child and Youth Center, MIC Program in Nanakuli, Treatment and Diagnostic Centers as proposed in the Model Cities master plan, Comprehensive Community Health Centers as proposed by OEO and others."

Dr. K. S. Tom noted that Dr. Richard Omura has been working in this area.

Dr. Mills stated that an ad hoc committee will be established and it is hoped that by the next Council

meeting there might be a positive statement on this matter.

NEW BUSINESS

Appointment of Chairman for Cancer Commission: The Cancer Commission make-up is as follows: HMA representatives—Grover H. Batten and Drake Will; Department of Health representatives—Ralph B. Berry and Kleona Rigney; and Cancer Society representatives—Carl H. Lum and Robert G. Rigler. Dr. Grover Batten was nominated as chairman.

ACTION:

It was voted that Dr. Batten be appointed chairman of the Cancer Commission.

Environmental Health Programs: No pertinent material was attached to the agenda so this matter was not discussed.

Highlights of the AMA New York Meeting: Dr. Mills stated that a report of the meeting will be circulated to the members of the Council.

Interim Meeting of the House of Delegates: Dr. Mills stated that depending on the evaluation of the Medicaid Program and Workmen's Compensation it will probably be necessary to have an interim meeting of the House of Delegates.

ACTION:

It was voted to leave the decision of having an interim House of Delegates meeting to the discretion of the President of the HMA.

MISCELLANEOUS BUSINESS

Annual Meeting of the Medical Assistants: The Medical Assistants are requesting some type of donation from the HMA. It was pointed out that the Honolulu County Medical Society is sponsoring a beach breakfast of coffee and doughnuts. They are suggesting that perhaps the HMA would sponsor light refreshments (punch and cookies) for one of their social events. Mr. Thorson said that the breakfast they are sponsoring will cost the HCMS approximately \$250-\$400 for approximately 200-300 people. It was suggested that this matter be left to the discretion of the officers.

ACTION:

It was voted that the matter of sponsoring light refreshments for the National Convention of Medical Assistants be left to the discretion of the HMA Officers.

Request for Legal Opinion from Maui County Medical Society: Dr. John F. Morris, President of the Maui County Medical Society, stated that he requested by telephone information relating to the tax-exempt status of the Maui County Medical Society if they accepted a blank check from a private individual to build a hospital and they were told that this could not be done without permission. Maui County would like Council permission to obtain legal opinion from Mr. Tom Rice regarding the tax-exempt status of the Maui County Medical Society if they should accept a gift in the form of a blank check for the erection of a community hospital.

ACTION:

It was voted that legal opinion be obtained from Mr. Rice in regard to the tax-exempt status of the Maui County Medical Society in the event MCMS accepts a monetary gift to build a community hospital.

Tumor Registry Grant: Dr. Grover H. Batten presented a rewrite of the Tumor Registry grant application. Dr. Batten gave some background information about the rewrite and stated that he was advised by Dr. Hasegawa that this rewrite would again have to have HMA Council approval.

continued page 68

A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulfate still remains the standard."* However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A® base.†

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is

practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to

continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.

*McClarín, W. M., and Knox, J. M.: *Cutis* 3:619 (June) 1967.

†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.



Tinver® Lotion

Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.



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ACTION:

It was voted to approve the rewrite of Tumor Registry grant.

Annual Picnic for Medical Students of the University of Hawaii: Dr. Mills stated that he had talked to Dr. Cutting about an annual picnic in Punaluu for the medical students of the University of Hawaii and their wives. This will involve about 75 students and wives and will be held in Punaluu on September 14. He asked if the Council would be interested in supporting this annual event and involving the Public Relations and Medical Education Committees. This would be ideal public relations. Otherwise, Dr. Mills said that this event will be done under the auspices of the Athletic Association.

ACTION:

It was voted that the HMA participate in this proposed function.

Presentation of Resolution: Dr. Richard D. Moore was presented a resolution of appreciation for his ten years of service as the AMA Delegate to the HMA. Dr. Moore received a standing ovation of thanks from the Council.

Correspondence from Mabel Smyth Building Director: Correspondence was received from the Director of the Mabel Smyth Building regarding charging the HMA for the use of the Conference Room. Dr. Lowrey reported that this matter was discussed at the Mabel Smyth Board Meeting and it was pointed out at that meeting that the HMA utilizes the Conference Room every day and no one else is able to use the room. This being the case, the Board felt that the HMA should pay for this space. Dr. Lowrey said he refrained from voting on the matter. The increase of rent will be from \$411.30 to \$601.20. The Council felt that since this is not a budgeted item, and that Mabel Smyth did not give the HMA enough warning that this increase was forthcoming, that the HMA is unable to pay the additional rent increase.

ACTION:

It was voted that the President write an appropriate letter to the Mabel Smyth Board expressing the opinion of the Council.

Executive Session:

Invitation to Woman's Auxiliary: Dr. Mills suggested that the President of the Auxiliary be invited to attend the Council meetings. No fiscal appropriation was made.

ACTION:

It was voted to invite the President of the Woman's Auxiliary to attend all Council meetings.

The meeting adjourned at 3:45 P.M.

R. VARIAN SLOAN, M.D. ■
Secretary

pathologist and consulting pathologist to most of the hospitals of Honolulu; truly a pioneer in his chosen field.

He organized training programs for medical technologists at the University of Hawaii, and for the Society of Medical Technologists, and was instructor in Bacteriology in the Dental Hygiene Clinic. He was a very active member of the Board of [Leprosy] Hospitals and Settlement from its beginning. He became actively interested in tissue culture while Dr. Alexander Maximov was his guest in 1926, and spent "spare" time in that work in his own Laboratory.

During the school term of 1928-29 he was Associate Professor of Pathology at the University of Illinois College of Medicine, under his friend, William F. Petersen.

As early as 1937, he did active work in establishing a blood and plasma bank for the Islands. On December 7, 1941, he had his own supply of plasma, with all equipment for giving it, "ready to go," using it at Tripler.

He was a member of more than twenty local and national scientific bodies, and the author of many papers, the first written in 1918 while teaching at Cincinnati Dental College.

His style was unorthodox, but always interesting, and he earned the title "gadfly of the medical profession" by urging his fellows to *think*; he was not afraid of confession of ignorance, and was always true to himself and colleagues.

He was never too busy to lend an ear, advice, or money in response to honest appeals; he was liberal in support of music, art, and education, and in judgment of men.

Early on the morning of December 24, 1957, after a long, crippling illness, he died, leaving his wife, Nancy Nickell Fennel; a son, William Adolphus Fennel; a daughter, Elizabeth Fennel Harrison; and three granddaughters, Betsy, Susan, and Helen Harrison. ■

Written by N. N. F.

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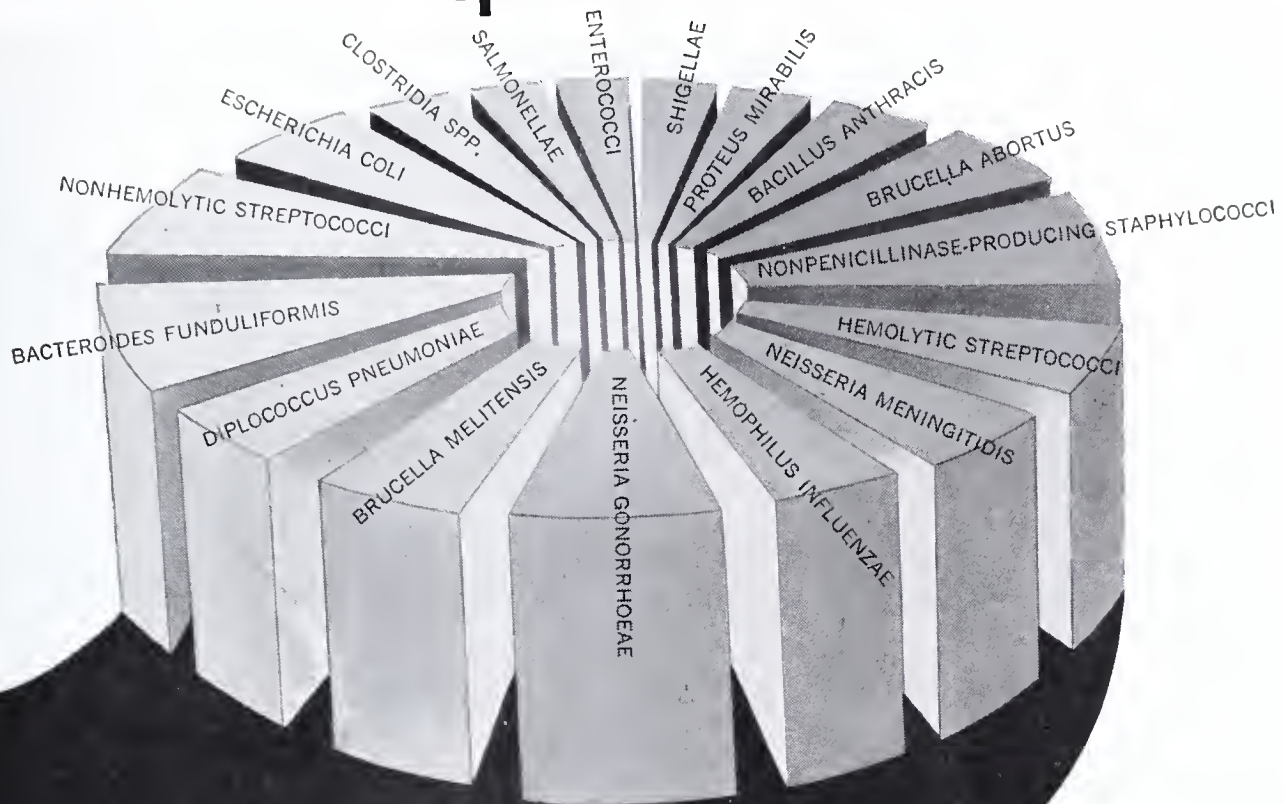
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Contraindications: A history of allergic reactions to penicillins or cephalosporins and infections due to penicillinase-producing organisms.
Precautions: Typical penicillin-allergic reactions may occur, especially in hypersensitive patients. Mycotic or bacterial superinfections may occur. Experience in newborn and premature infants is limited and caution should be used in treatment, with frequent organ function evaluations. Safety for use in pregnancy is not established. In gonorrheal therapy, serologic tests for syphilis should be performed initially and

monthly for 4 months. Assess renal, hepatic and hematopoietic function intermittently during long-term therapy.

Adverse Reactions: Skin rash, pruritus, urticaria, nausea, vomiting, diarrhea and anaphylactic reactions. Mild transient elevations of SGOT or SGPT have been noted. Black tongue has been noted in some patients receiving the Chewable Tablets.

Usual Dosage: Adults—250 or 500 mg. q. 6 h. (according to infection site and offending organisms). Children—50-100 mg./Kg./day in 3 to 4 divided doses (depending on infection site

and offending organisms). Bacterial meningitis—150-200 mg./Kg./day in 6 to 8 divided doses. Children weighing more than 20 Kg. should be given an adult dose when prescribing orally. In parenteral administration, children weighing more than 40 Kg. should be given an adult dose. Beta-hemolytic streptococcal infections should be treated for at least 10 days.

Supplied: Capsules—250 mg. in bottles of 24 and 100. 500 mg. in bottles of 16 and 100. For Oral Suspension—125 mg./5 ml. in 60, 80 and 150 ml. bottles. 250 mg./5 ml. in 80 and 150 ml. bottles. Chewable Tablets—125 mg. in bottles of 40. Injectable—for I.M./I.V. use—vials of 125 mg., 250 mg., 500 mg., and 1 Gm. Pediatric Drops—100 mg./ml. in 20 ml. bottles.

11-1/2/69

A.H.F.S. Category 8:12.16

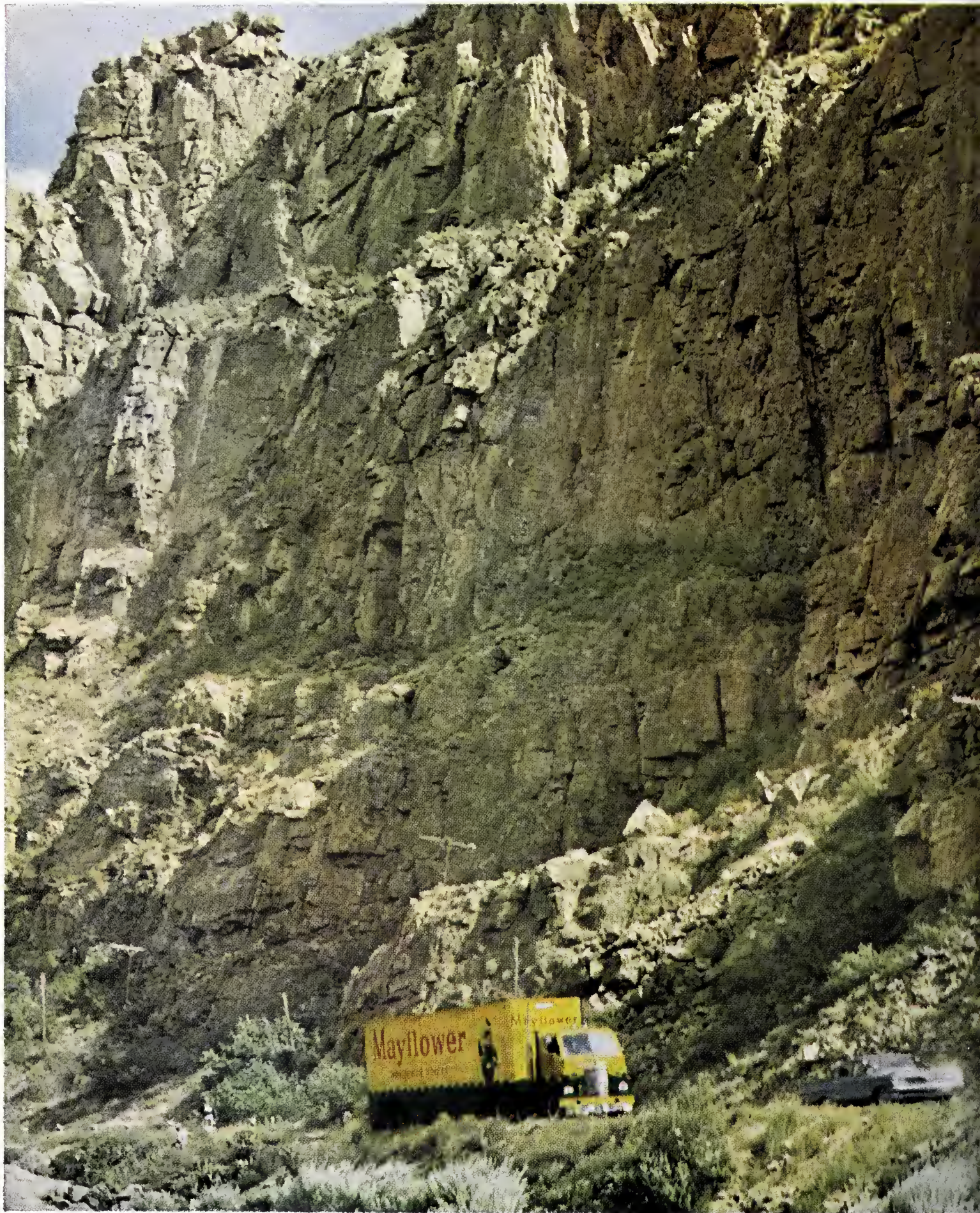
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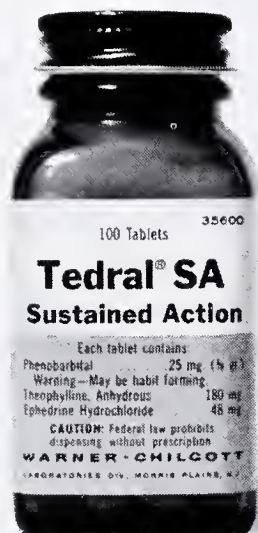
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Indications: Tedral SA offers the convenience of b.i.d. dosage in the prophylactic treatment of bronchial asthma, asthmatic bronchitis, and bronchospastic disorders. It may thus be particularly useful in managing occasional, seasonal, or perennial asthma.

Tedral SA is an adjunct in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications: Sensitivity to any of the ingredients; porphyria.

Warning: Drowsiness may occur. Phenobarbital may be habit forming.

Precautions: Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions: Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Dosage: Adult (average prophylactic or therapeutic dosage)—one tablet on arising and one tablet 12 hours later. Tablets should not be chewed.

Supplied: Bottles of 100 and 1000 tablets.

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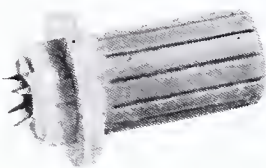
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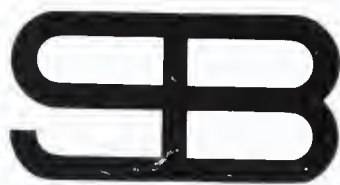
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Notes and News continued from 53

commented honestly, "The amount of subconscious bias which influences all reports is fantastic." Marshall prefers a radical mastectomy without adjunctive therapy because he feels these other modalities have not shown any substantial increase in survival rates. A local pathologist interjected that there is a higher host resistance in Japanese women in Hawaii and that he feels that simple mastectomy with axillary node examination without radiation is preferable. He has found a 70 per cent five-year survival in breast cancer in Japanese women, regardless of treatment.

Alexander Leaf, a balding, bespectacled, slight-statured intellectual giant, was the visiting professor of medicine at St. Francis Hospital, where he lectured to capacity crowds in his rasping voice. Alex has the rare gift of making the obscure logical and simple and seemed to boil everything down to the reflection coefficients of thiourea, chlorides, and urea in the toad bladder. We learned moreover that death from K depletion leaves no demonstrable pathology.

In August, we were treated to two weeks of **Telfer Reynolds**, Professor of Medicine from USC. Telfer, a lanky Mediterranean type with curly grey hair, a furrowed brow, and a baritone voice, used TV video tapes of patient interviews for his series, aptly designated "Differential Diagnosis in Internal Medicine: The Uncommon, but Instructive Case." The lectures, in the form of friendly quizzing of the audience, especially the house staff, were instructive as well as constructively uncomfortable. **Allan Leong**, assistant chief of medicine at Queen's, presented the usual plaque at the conclusion of the lecture series with the comment, "We were rather uncomfortable at times, but we all benefitted greatly..." We were most impressed at the ease with which Telfer fielded and analyzed all questions. Regarding dieting for hyperlipoproteinemia, he said, "Patients will be mentally better, but physically worse. But we have to get on the band wagon, otherwise we will be considered therapeutic nihilists."

Happiness

Happiness for some is just being out of a hospital bed... We were hailed by a hearty voice and chatted with **Blue Nishigaya**, who had only recently recovered from an anteroseptal infarct. He reviewed how he had gone home around 1:00 A.M. from a dinner meeting, smoked 2½ packs that day, and woke up at 3:00 A.M. with a slight case of indigestion which became worse. He arrived in CCU within 40 minutes after the onset of pain, feeling rather foolish then, but thankful later. Blue warns us that the contributing factor was probably the 1½ to 2½ packs of cigarettes he smoked daily, and the late TV shows he watched nightly.

We also met a cheerful **Perry Sumida**, looking 10 years younger and even flirting with nurses. Between his biweekly dialyses, Perry is back at part-time practice and even does surgery on Fridays, silastic tubing and all. He reminds us that even physicians should take annual physical exams, for that is how his kidney condition was first discovered.

We played golf with **Ted Tomita**, who is rapidly regaining his nine-handicapper form but still insists on strokes from his hapless opponents. We talked about the 11 surgeries he has had thus far for his cervical discs and the complications therefrom, and about how relieved we were to see him back in circulation.

Accident Prone?

We wonder sometimes whether physicians are fragile or just accident prone... Poor **Bob Ballard** was on a ladder picking lichees when he fell and broke his left arm in several places. Picking lichees may be dangerous enough, but jogging and tennis may be equally hazardous. **Sau Ki Wong** ruptured his Achilles tendon jog-

continued page 74

"prep" the colon with pleasant-tasting X-PREP Liquid

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Contraindication: Acute surgical abdomen.

Supplied: Ready-to-drink in 2½ oz. bottles (complete adult dose).

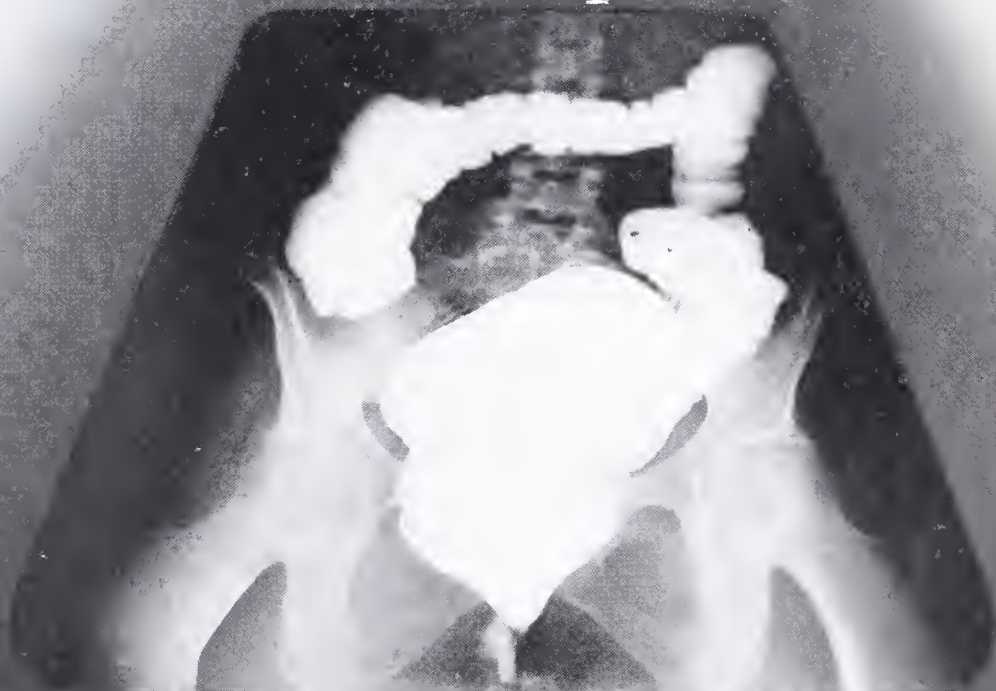
Also available: X-PREP Powder (standardized senna concentrate). Mixed with water, ¼ oz. canister provides complete adult dose.

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for a clear picture



*X-ray visualization following barium enema.
Patient prepared with single dose of X-PREP
Liquid—2½ oz. Note absence of fecal retention.
Courtesy of Statman, A. J.: An Effective Single-Dose
Evacuant, J. M. Soc. New Jersey 63:95 (March) 1966.*

ging, and **Ed Emura** his plantaris. **Jordon Popper** claims he ruptured his soleus playing tennis, but we are inclined to feel that it was his plantaris. Ed and Jordon can now join the Plantaris Rupture Club, which includes **Charley Ching**, **Tom Oshiro**, et al.

Medical Arts Golf Tournament

The annual Medical Arts Golf Tournament was held at the Mid Pac Country Club on August 7 under the direction of a worried tournament chairman, **Hideo Oshiro**, who was last year's winner. Hide worried so about the tournament arrangements that his own game fell apart. **Cool Wakai** handled the Calcutta (with only a minor hitch when one of the participants failed to show and feelings were grated when a rebate was denied) and **Don Maruyama** had the jackpot under control. **Frank Fukunaga** (whom **Ted Tomita** dubs The Mechanical Man) shot inspired golf all afternoon and with his net 69 was a triple winner in the jackpot, the Calcutta, and the tournament. **Ike Nadamoto** was 2d with net 70 and **Ed Izawa** was in a 4-way tie at 3rd. **Art Salcedo** and **Y. Fukunishima** were tied at 4th. In the guest flight, **Richard Lam** was first with a net 70, **Masaru Koike** and **Mike Okihiro** were tied with three others in 3rd place at net 72.

At the post tournament dinner, MC **Paul Tanura** (who missed his calling on TV's Tonight Show) was hilarious. "In a banquet of this magnitude, we usually have a kahuna perform a ceremony, but at the Medical Arts, we go a step forward and call on the Deity himself... **Dr. Sakimoto**, please come forward..." So the Deity came forth with all his usual aplomb... Paul also noted, that "Golf is a game of sportsmanship and fellowship... If you win, you are called a ringer, sand-bagger, and other names. If you had a bad day, you are a 'sportsman'." Paul was a great sportsman that day only to be outdone by the "Greatest Sportsman" **Hideo Oshiro** who received a can of Man Power deodorant spray for "The Longest Drive of the Day" (a 5-foot dribble) and "The Most Balls Lost" (sob!... our Calcutta partner, at that!). **Tom Oshiro**, who had a gross score of 110, was dutifully crowned, "The Most Methodical Golfer" and **Walter Yokoyama** was awarded a pair of rubber slippers for "The Most Topped Balls" with the advice, "Next time, take off your shoes and wear these." **Don Maruyama** was awarded an oil can for "The Smoothest Swinger" award and **Nobu Nakasone**, who is noted for his 5-minute preparations before each swing, was recognized officially as "The Thinking Man on the Golf Course."

Professional Moves

We are happy to report that the migratory instinct of homo sapiens medicus is apparent again. In June, **Paul**

Matsumoto moved from Kaiser to the Hamakua Infirmary, Honokaa, where he is doing general and chest surgery, replacing **George Oakley**, who is convalescing at Maunalani Hospital from his tragic auto accident. **Jerome T. Kay** is handling the medical portion at the Hamakua Infirmary. **Wini Lee** has left the Chang-Wakai Clinic and relocated at 1441 Kapiolani Blvd., where he is practicing internal medicine, endocrinology, and metabolism. We also note that a Stanford man, **Kenneth Gardner**, who specializes in kidney diseases, has joined the U. of H. Medical School as full professor. Kenneth was named the outstanding teacher by the Stanford Med School classes of 1971 and 1972.

In July, **Kenneth Chinn** moved to the Pali Medical Building to practice solo anesthesia. **Alvin Paraz** also disassociated to go into solo practice at 445 No. King Street. The Medical Group (a copartnership of 44 physicians) changed its name to The Honolulu Medical Group. The change was made to strengthen the group's identity and eliminate confusion. It plans a new medical facility at Beretania and Lauhala Streets, behind the Hawaii Medical Library. We had a real bonanza in August. **Anna Maria** and **Roger Brault** relocated to 419 Uluniu Street, Kailua. Ob-Gyn man **Wayne Takemoto** associated with the Fronk Clinic at 839 So. Beretania Street. Orthoped **Garth Y. Morimoto** associated with **Don Maruyama** in the Medical Arts Bldg. The Honolulu Medical Group announced the affiliation of internist **Jack Scaff**, neurologist **Robert Bart**, and Ob-Gyn man **Thomas Teruya**. **Michael J. McDonald**, who interned at Queen's, located in Wailuku, Maui, thus becoming the first orthoped to settle outside of Honolulu. He is not to be confused with another new physician on Maui, a **William MacDonald**, so we are informed.

Al Majoska, medical examiner from 1961 to May, 1968 and City Coroner's physician for 15 years, is on active duty with the National Guard. Al recently asked the City Council to reconsider the recent 10% raise for his position. The Mayor had asked for a 33.1% raise (from \$19,500 to \$26,400 by 1970) which the Council turned down. Al pointed out that Florida has trouble filling its medical examiner's job despite a \$40,000 salary offer, and that even medical residents in New York hospitals make \$15,000. Al wants to return to his job, "but only because living in Hawaii is partial compensation.... The salary of the medical examiner is at present no great attraction."

Elected, Appointed, Honored

Affable **Denis Fu** was a judge at a "Happy Baby" contest in Wailuku. He had to choose among 99 contestants and their mothers. We would judge this to be a most unpleasant situation to be in even for an affable guy. One of the real political influences in town, **Robert Chung**, was confirmed as police commissioner by a unanimous Council vote. When someone suggested that his brother, a close friend of Mayor Fasi, had arranged it, Bob was indignant: "I don't owe anybody anything."

continued page 78

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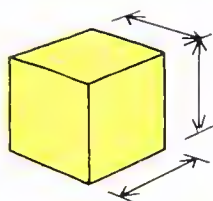
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(sulfamethizole 0.5 Gm.)

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A widely accepted rule of thumb for diagnosing urinary tract infection is the presence of more than 100,000 organisms in 1 cubic centimeter of urine.^{1,2} The importance of promptly treating urinary infections, even when asymptomatic, is generally recognized.

But in any patient, whether infection is asymptomatic, or appears to be chronic or acute cystitis, prostatitis, urethritis, pyelitis, or, more seriously, pyelonephritis, an effective therapeutic answer has long been THIOSULFIL Forte (sulfamethizole). Here are the reasons: ■ **rapid absorption:** peak serum concentrations in one to two hours ■ **effective:** negligible penetration into red blood cells; high concentration in plasma to fight infection; lowest degree of inactivation of all sulfonamides ■ **no "loading":** no "priming" doses necessary ■ **rapidly excreted; noncumulative:** a safeguard against toxic buildup, even in long term therapy ■ **high solubility:** the most soluble sulfonamide in general use; hazards of crystalluria and hematuria virtually eliminated ■ **prolonged use:** permits virtually unlimited duration of therapy, thus helping to prevent relapse and progressive kidney damage ■ **well tolerated:** rarely produces side effects when noted, they are usually transient, seldom requiring discontinuation of therapy ■ no hematuria, anuria or agranulocytosis reported

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(sulfamethizole 0.5 Gm.)

Advantages: 1) high concentration of free sulfa rapidly achieved at site of infection; 2) rapid excretion (noncumulative); 3) outstandingly free from side reactions; 4) high degree of clinical effectiveness.

In a composite group of 3,600 patients receiving THIOSULFIL (sulfamethizole), only 1.4 per cent showed side reactions—none serious (gastric distress, pruritus, nausea, fatigue, anorexia, eye discomfort, and 2 cases of transient crystalluria). No hematuria, anuria, agranulocytosis reported.

Indications: Treatment of cystitis, urethritis, pyelitis, pyelonephritis, and prostatitis due to bacterial infection amenable to sulfonamide therapy; prior to and following genitourinary surgery and instrumentation; prophylactically, in patients with indwelling catheters, ureterostomies, urinary stasis, and cord bladders.

THIOSULFIL (sulfamethizole) has been found effective against the following urinary tract pathogens: *Proteus vulgaris*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Streptococcus fecalis*, *Escherichia intermedium*, and *Aerobacter aerogenes*. In individual cases, sensitivity of the organisms may vary. Sensitivity tests, preferably by the tube dilution method, should be done first, for guidance as to alternate therapy. In case THIOSULFIL Forte (sulfamethizole) does not control the infection.

Contraindication: A history of sulfonamide sensitivity.

Warning: Because of the high solubility in body fluids of sulfamethizole in its free and acetyl forms, the hazards of renal tubule obstruction are minimized. The usual precautions generally exercised with sulfonamides should, however, be observed. In those rare instances where exanthemata, urticaria, nausea, emesis, fever, hemolytic anemia, or significant hematuria are encountered, administration should be discontinued.

Suggested Dosages: Suggested range of dosage—Adults: 1 or 2 tablets (0.5 Gm.—1.0 Gm.) three or four times daily.

An initial dosage of 3 Gm./day for two weeks will usually bring the infection under control. Where longer therapy is necessary, 2 Gm./day has been successfully employed. Patients with incurable chronic infections may require only 0.5 Gm./day to remain indefinitely symptom-free.

Supplied: No. 786—Each tablet contains sulfamethizole 0.5 Gm. (scored), in bottles of 100 and 1,000.

References: 1. Kincaid-Smith, P., and Bullen, M.: *Lancet* *i*:395 (Feb. 20) 1965. 2. Sacks, T. G., and Abramson, H.: *J.A.M.A.* 201:79 (July 3) 1967. 3. Kass, E. H.: *Practitioner* 188:22 (Jan.) 1962.

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Warning: See THIOSULFIL Forte (sulfamethizole).

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Adults: 2 tablets, four times daily. *Children* (9 to 12 years): 1 tablet, four times

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What my brother does politically has no effect on what I do. I feel that I was appointed because of my past involvement in community affairs and because the Mayor felt that I would be an innovative force on the commission." (A little sibling jealousy may be showing through, eh?) **Min Hin Li** was one of the fighters for Korean independence who worked with the late Syngman Rhee here and in Washington. He was recently cited and honored by the president of Chung-ang University, Seoul, Korea, for his endeavors. **Richard Lam** is the new president of the Hawaii Chapter of Creighton University Alumni and **Dick Omura** president-elect. **Maria Branit** is the windward branch chairman of the Oahu unit of the American Cancer Society. "Bud" Tompkins, recently retired superintendent of Kula Sanatorium, became the first neighbor island representative elected to the Hawaii Heart Association's board of directors. **HMA prexy George Mills** was elected co-master of ceremonies for the Windward Oahu Statehood Eve Festival at Ulu Mau Village in Heeia, which featured music, dancing, and song in real Hawaiian (not hapahaole) style. **Bob Peyton, Jr.**, is a new board member of the Hawaii State chapter of the Red Cross. **Lyle Phillips** is on the executive committee of the Hawaii Foundation for American Freedoms and **Ralph Cloward** is a board member of the Rotary Club of Hawaii. **Scott Brainard**, whom we recall as the dynamic surgeon in the TV feature, *The Mark Waters Story*, was elected the first medical director of The Honolulu Medical Group.

Community Notes

The Woman's Auxiliary to the Honolulu County Medical Society received the Emergency Health Service Award (previously the Health Mobilization Award) for its project on Poison Prevention. Great, great, great! **Noboru Ogami** and **Cora Au** are involved in a Nuuanu YMCA sponsored Adult-Youth Communication on Values workshop which will discuss sex education. It seems that "both youths and adults learn best about their own sexuality in small groups where a climate of openness and trust prevails." (Beats seeing *I Am Curious (Yellow)*, eh?) **Bob Noyes**, medical director of Hawaii Planned Parenthood, was not discouraged when an 18-year-old single girl showed up as the only client in the first of a weekly series of birth control clinics at Mayor Wright Homes. Bob feels that "planned parenthood" has better appeal than "birth control," but how about this unmarried teenage client?

John Morris, president of the Maui County Medical Society, says that things are rolling toward the construction of a 250-bed community or private hospital at Maalaea, a project which would take three to four years to complete and cost \$8 million. (The Mauians are really up in arms about the possible State takeover of hospital facilities on Maui.) Crusader **Keith Nesting** and other civic leaders in the Waimea area fought the erection of utility poles along the nine-mile scenic "Mud Lane" highway by the Hilo Electric Light Co. and lost. **Les Vasconcellos** is responsible for the aluminum sculpture, "Raana," by Martin Newman, located near the entrance of St. Francis Hospital and dedicated to the late **John M. Felix**. Wait. . . . It may grow on you.

Entrepreneurs

From Dave Donnelly's column, we gleaned that **Fred K. Lam** at age 74 has ventured into real estate for the first time with the purchase of a Waipahu apartment house. (For a retirement income?) **Richard Chang's** dream of a medical center off Pali Highway was assured when Beverly Enterprises of California purchased the package. The complex will be completed by 1973 at a cost of \$17 to \$20 million with an \$11 million 276-bed general hospital, a 200-bed extended-care facility, 50 units for nurses, and a medical office building for 40 physicians. A hui of doctors from the Maui Medical Group is out to buy the Wailuku Hotel and plans to put

a medical center and offices on two of the floors and leave the remaining floors for hotel operation. **Clarence Chang**, treasurer of Koa Annuetue and U. of H. Board of Regents member, devised a unique plan whereby 220 contributors pledged the interest on \$1,000 loans for five years for the construction of a 48-room 3-story dormitory to house U. of H. athletes. **Kiyoshi Inouye** wishes to build a high rise with commercial units on the ground floor and apartments above on his property at 1020 and 1022 So. King, but the Council is reluctant. **Richard Kelley** owns the principal part of Waikiki Surf North and minor interests in Waikiki Surf South as well as other Roy Kelley subsidiaries. (Not all doctors are poor businessmen, it seems.) **William Bergin** is chairman of the Hawaii Redevelopment Agency, which launched the \$6.8 million Hilo Mall Shopping Center at Project Kaiko'o. Bill is also director of the Royal State National Insurance Co., where **Edmund Lee** is chairman of the board.

Miscellaneous Items

The following is an actual protocol from the regular Friday morning Queen's medical conference: **SHOW AND TELL ROUNDS** (Presentations and Discussions by House Staff) Cases: 1. Low Calorie Sherry. 2. A Hot Drug. 3. Kissing Encephalopathy. 4. Effective Anger on Coronary Profusion. 5. PVC's that Come Home to Roost. 6. Embryologic Anemia. 7. Sore Joints and Other Things. (Methinks the generation gap is really showing.)

Keith Nesting took his foreign car to Hilo for minor repairs. The mechanic was cutting off a tail pipe with a torch when the undercoating caught fire and the gasoline tank went boom! The resulting fire damage to the car was \$350. Poor Keith. First the mayor turns down his petition, and now this. Could drive us to drink, you know.

We noted this item in the *Advertiser* column "Crossroads." "The Hawaii Medical Library has been given \$10,000 for its reference section and \$2,250 has been set aside to pay for a three-day course on mind-affecting frugs [sic] at the University of Hawaii." (Alas! Perhaps we are too late . . .)

Bulletins

The Honolulu Medical Group Research Foundation and the School of Medicine, University of Hawaii, will present a symposium on "The Transplantation of Human Organs" at HIC Oct. 12 and 13. Guest speakers are **Robert Good**, **Irvine Page**, **David Rubsam**, and **Thomas Starzl**. **Norman Goldstein** is symposium chairman. Scientific program \$15, Banquet at Ilikai, Sunday, Oct. 12, \$10. Limited reservations being taken.

The Division of Maternal and Child Health of the University of California School of Public Health has the following postgraduate programs in the field of Maternal and Child Health which lead to the degree of Master of Public Health: Maternal and Child Health; Family Planning; School Health; The Multiply Handicapped and Mentally Retarded Child; and Career Development Program. Tax-exempt fellowship support is available. Applications for July or Sept., 1970, are being accepted: Write **Helen M. Wallace, M.D.**, School of Public Health, University of California, Berkeley, California 94720. Letter received by **Claude Caver** from **Marwali Harahap, M.D., Ph.D.**, Department of Dermatology, University of North Sumatra Medical School, Medan, Indonesia.

Dear Dr. Caver: Our appeal in the medical journal requesting for assistance seemed to have not much favorable response. We need very badly a ultraviolet lamp for treatment of psoriasis, vitiligo, etc. Could you probably help us by raising funds among friends or people who are willing to help so that our charity hospital can have an ultraviolet lamp. We will be very grateful for your kind assistance. With best wishes. Sincerely yours, Dr. Marwali Harahap.

The Hawaii Army National Guard has a vacancy for a medical officer in the 298th Artillery Group (Air Defense) at Wahiawa, Oahu. Interested persons call 737-6744, Capt. Siu. ■

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tives, or tranquilizers if used with
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Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968^{1,2} estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contra-

ceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestagen-estrogen preparations.

Because these agents may cause same degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfabromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

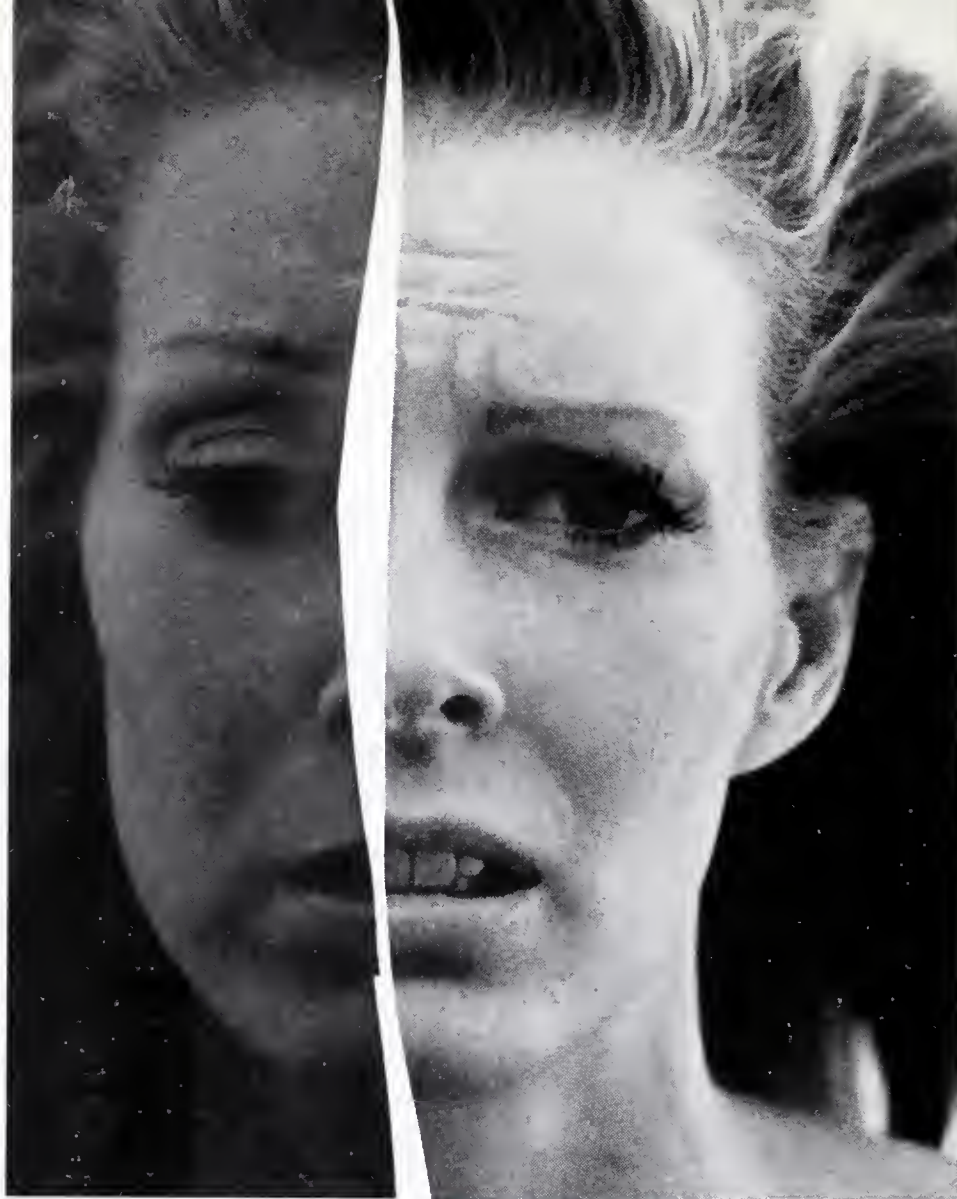
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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.



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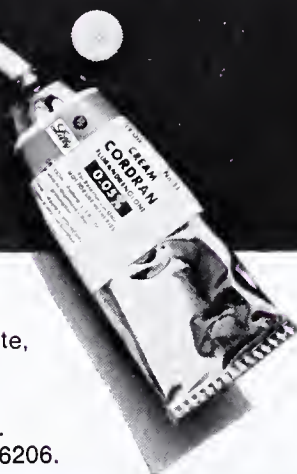
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**Toxoplasmosis
in Hawaii**

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**Morality of
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VOLUME 29 • NUMBER 2

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is not a harmless
privilege”**

—Current Therapy 1967, ed. by Conn, H. F., P. 88—

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Literature on indications and dosage available on request.

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References:

- (1) Siver, R. H.: CMD, 21:109, September 1954. (2) Frykman, H. H.: Minn. Med., 38:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., 51:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., 15:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., 58:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, 25:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., 20:591-593, November 1965.

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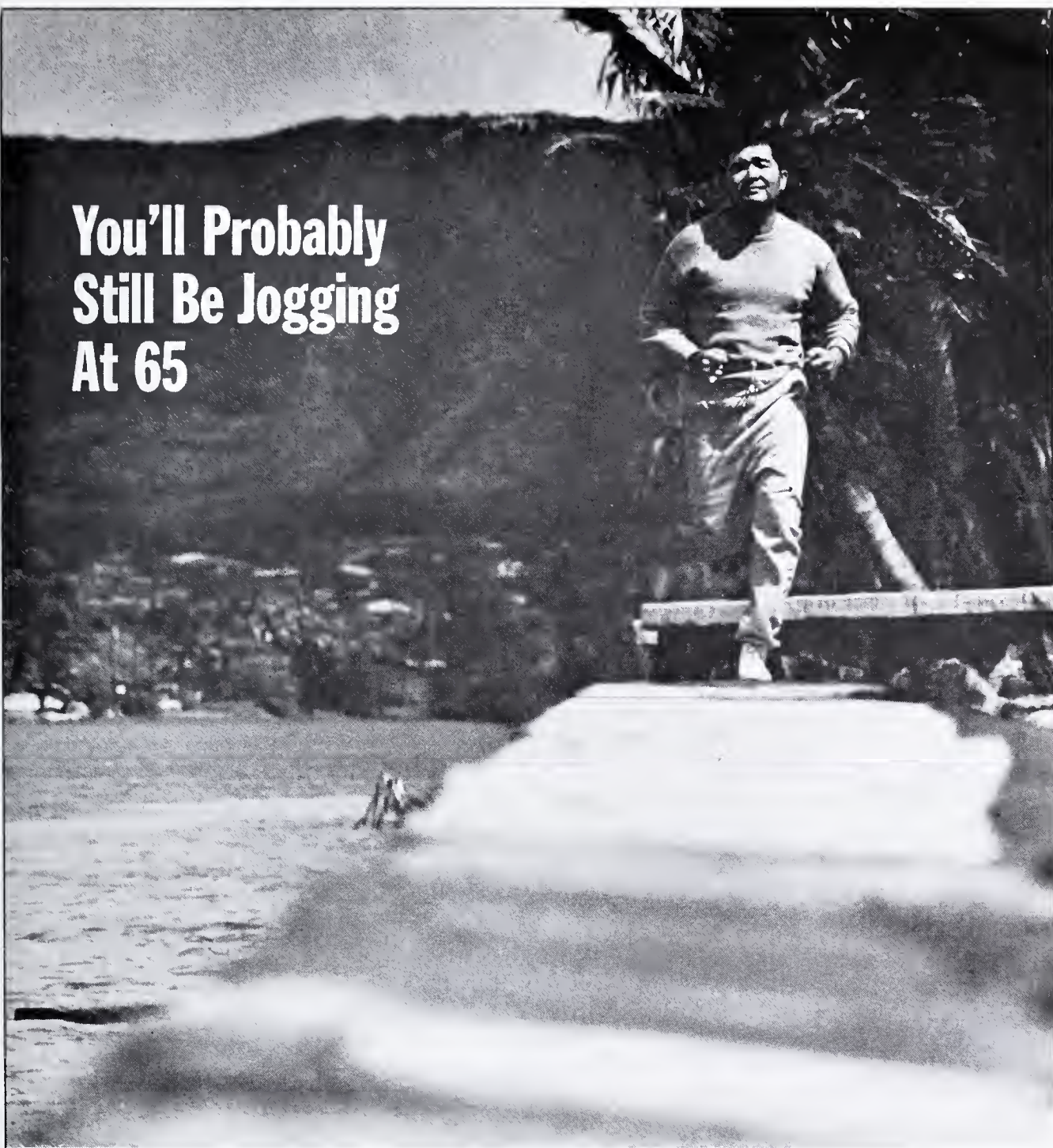
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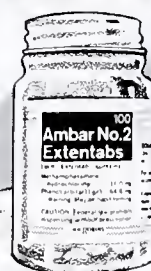
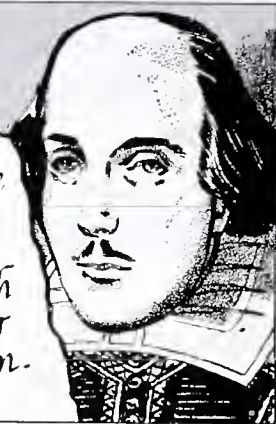
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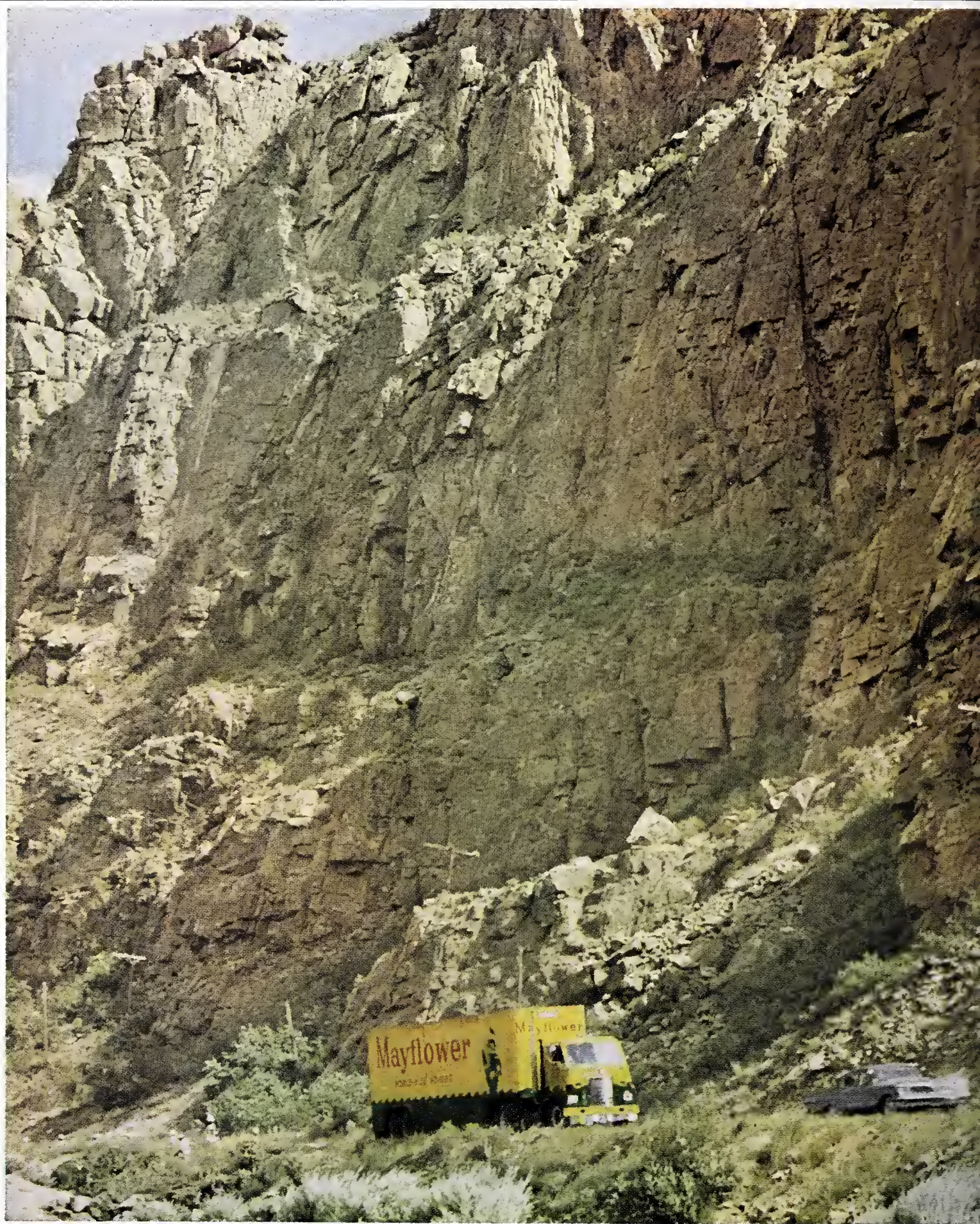
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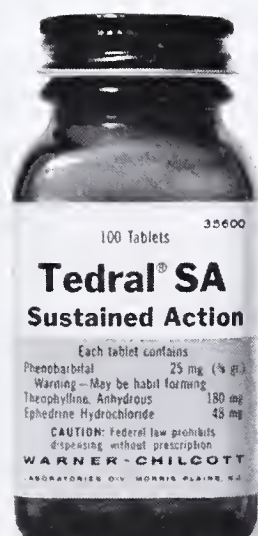
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References: 1. Danhof, I. E.: Report on file. 2. Hoon, J. R.: Arch. Surg. 93:467 (Sept.) 1966.

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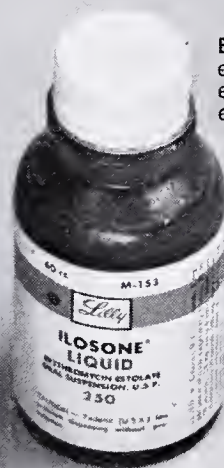


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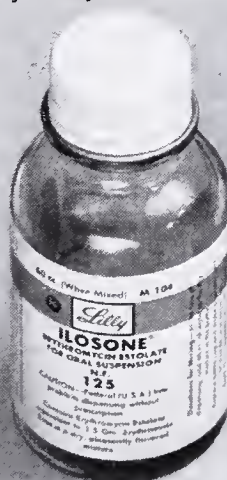
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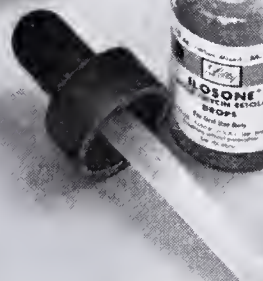
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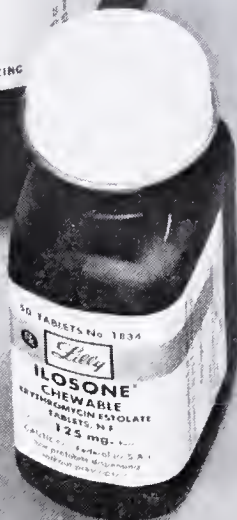
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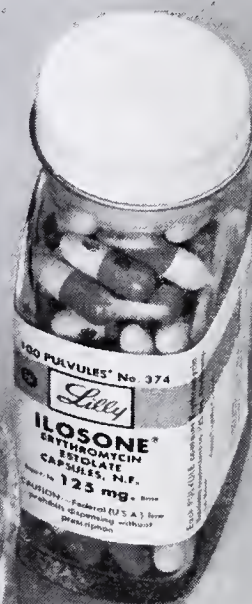
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Toxoplasmosis probably infects 60 per cent of Hawaii residents, yet it is hardly ever diagnosed when active.

Toxoplasmosis in Hawaii

GORDON D. WALLACE, D.V.M., LT. COL. JAMES W. BASS, MC, USA,
JAMES G. BENNETT, M.D., and
CLIFFORD J. STRAEHLEY, M.D., Honolulu

• *Eight cases of lymphadenopathy and three cases of chorioretinitis, probably caused by Toxoplasma gondii, have been seen in Honolulu residents. The clinical diagnosis of toxoplasmosis was supported serologically in all patients, and histologically in lymph node biopsies done on five. The patients were six to 49 years of age. Six had not been away from Hawaii for two or more years prior to their illness. The source of infection was not determined.*

In view of the cases herein described, and the high prevalence of toxoplasma antibodies usually found in residents of Hawaii, many undetected cases of toxoplasmosis are probably occurring in Hawaii. Most cases are undoubtedly mild or asymptomatic, but at least a few cases of severe disease can be expected.

HUMAN INFECTION with the protozoan parasite *Toxoplasma gondii* has been reported from most areas of the world where it has been searched for. Geographically, however, prevalence of infection has varied considerably, with the highest prevalences being found in tropical areas.¹⁻⁴ Infection in man is usually mild or asymptomatic, but the parasite can produce severe and fatal disease.

There are only two references to the occurrence of toxoplasmosis in Hawaii: one, a report of a well-documented fatal congenital case;⁵ the other, an inconclusive retrospective study of several suspected congenital cases.⁶ Since September, 1966, we have encountered 11 additional cases of toxo-

plasmosis on Oahu. Lymphadenopathy was the major finding in eight cases, and acute chorioretinitis in the other three. The diagnosis was substantiated serologically in all of the patients, and pathologically in five. A summary of these cases is presented.

SUMMARY OF CASES

Lymphadenopathy: Five of the patients with lymph node involvement were females and three were males. They were from six to 49 years of age. Six were Caucasian and two Oriental. Two were recent arrivals to Honolulu. The others had lived here from two to 49 years. Five had not been away from Hawaii for at least two years.

All but one of the patients requested medical attention because of the presence of one or more enlarged and sometimes tender lymph nodes. One patient was seen because of chronic fatigue, and enlarged nodes were found on examination.

The involved nodes were described as firm and discrete, and generally ranged from about 1.0 to 1.5 cm in diameter. Suppuration was not observed. In two patients, lymphadenopathy was noted only in the cervical region. In five others, enlarged nodes were detected in two or more of the following regions: cervical, submental, auricular, occipital, axillary, and inguinal. One patient was found to have a generalized mild lymphadenopathy. Lymphadenopathy was unilateral in four patients and bilateral in four.

Other signs or symptoms were noted in three patients. An eight-year-old girl was described by her mother as having persistent low-grade fever, myalgia, and malaise. Her illness was complicated by an episode of streptococcal pharyngitis for which she was admitted to a hospital. At this time she was found to have a slightly enlarged spleen. Another patient, her six-year-old sister, was noted by her mother to be listless and complaining of

Reprint requests to Pacific Research Section, National Institute of Allergy and Infectious Diseases, National Institutes of Health, P. O. Box 1680, Honolulu, Hawaii 96806 (Dr. Wallace).

From the National Institute of Allergy and Infectious Diseases, U. S. Army Tripler Medical Center, and the Kaiser Foundation Hospital.

Received for publication April 4, 1969.

TABLE 1.—*Number and type of leukocytes present in peripheral blood of patients with glandular toxoplasmosis.*

CASE	LEUKOCYTES PER MM ³	PERCENTAGE OF				
		NEUT.	LYMPH.	MONO.	EOS.	BASO.
1	8,780	40	46	8	6	0
2	5,170	48	46	3	3	0
3	7,950	52	42	4	2	0
4	6,020	43	42	15	0	0
5	10,600	56	43	0	1	0
6	8,650	47	44	1	8	0
7	5,500	43	54	1	1	1
8	8,450	55	39	2	4	0

muscle pains. One patient, a 44-year-old man, claimed to have been febrile (102° F.) for about 24 hours one month prior to noticeable enlargement of lymph nodes. He also complained of persistent abdominal pain.

The date of onset could not be determined with certainty in any of the patients. In most cases, in fact, lymphadenopathy had probably gone undetected for some time. The duration of known lymphadenopathy before the patient received medical attention varied from one to eight weeks. After being noticed, enlargement persisted in most patients for at least two months. However, in one patient, lymph nodes were found to be normal in size five or six weeks after apparent onset of the disease. In four others, lymph nodes were reported to be normal on follow-up examinations at 3, 8, 9, and 15 months, respectively.

One remarkable feature of all cases was a relative lymphocytosis (Table 1), with otherwise normal hemograms. In one patient, the eight-year-old girl referred to above, serial examinations of blood over a six-week period revealed a constant lymphocytosis, with percentages of lymphocytes ranging between 44 and 62. She also had a slight eosinophilia. Her hemograms were otherwise normal except for a leucocytosis during the streptococcal infection.

Lymph nodes of four patients were biopsied within two to four weeks of apparent onset and nodes of one other patient were biopsied at about ten weeks. Gross pathology was not remarkable but the microscopic findings were characteristic in all cases. Consistently, there were enlarged, often pale, reactive centers containing mainly histiocytes showing phagocytosis of nuclear fragments. Frequently, there were also tiny clusters of histiocytes scattered throughout the section. In general, the pathology could be described as inflammatory change with pseudogranulomatous histiocytic hyperplasia.

A Sabin-Feldman dye test was conducted on at least two serum specimens from all but one patient. Dye-test antibody titers by "time after apparent onset of disease" are listed in Table 2. It will be

noted that a fourfold rise of titer was demonstrated in only one patient. However, with the possible exception of case no. 8, the antibody titer of the initial specimen from each patient was elevated enough to indicate recent infection.

The sera of three patients were tested for heterophil antibody and the results were negative. Funduscopic examination of five patients and chest x-rays of six failed to reveal abnormalities. The disease in all patients was self-limiting and specific treatment for toxoplasmosis was not attempted.

Chorioretinitis: Three cases of acute chorioretinitis with dye-test antibody titers high enough to warrant a presumptive diagnosis of toxoplasmosis also came to our attention. All three patients were men between 17 and 47 years of age. Two, of Portuguese descent, had lived in Hawaii their entire lives; one had never been away from Hawaii. The third was a Caucasian serviceman who had been in Hawaii for only two months.

Onset was sudden in all three, with ocular pain and blurring of vision as the major complaints. One claimed to have suffered from three separate episodes of fever and headache within several weeks before onset of eye involvement. The older of the three had experienced similar attacks of eye disease during each of the two preceding years at about the same time of year. There was no evidence of previous eye disease in the other two.

Hemograms done during the first two or three weeks after onset in two, and at eight weeks in one, showed slight elevations in total leukocytes and slight-to-moderate elevations in neutrophils. However, a second leukocyte count done on one patient nine weeks after onset revealed a slight lymphocytosis. The dye-test titers of each patient, determined on specimens collected the second day, second week, and sixth week after onset, respectively, were 4,000, 2,000, and 2,000.

All three were treated with pyrimethamine and sulfonamides and made uneventful recoveries.

DISCUSSION

Lymphadenopathy: Lymphadenitis caused by *Toxoplasma gondii*, commonly referred to as "glandular toxoplasmosis," is a well-documented and widely recognized disease. In 1956, Siim⁷ reported ten cases in which diagnosis was confirmed both serologically and by isolation of the parasite from one or more lymph nodes. He divided his cases clinically into febrile, nonfebrile, and sub-clinical forms, and reported that the clinical laboratory findings were generally normal except for a relative lymphocytosis with up to 70% lymphocytes. In some of his cases the large lymphocytes were observed to be atypical. He described the pathology in lymph nodes as reticulum cell hyper-

TABLE 2.—*Dye-test antibody titer of patients with glandular toxoplasmosis by time after apparent onset.*

CASE	WEEKS AFTER ONSET							
	1-2	3-4	5-6	7-8	9-10	20-21	32-38	44
1	66,000							16,000
2			16,000					250
3				16,000				
4		131,000		66,000				
5			33,000	33,000				
6			4,000	8,000	16,000	8,000	16,000	
7	4,000		4,000			4,000	8,000	
8			1,000	1,000				

plasia with islands of large eosinophilic cells scattered over the whole section. Other series of cases, although usually not as well confirmed as Siim's, have nevertheless documented the characteristic clinical, laboratory, and pathological findings.⁸⁻¹³

The cases in Hawaii conform well to those of Siim and others, and although the organism was not isolated, the dye-test results and other findings make it highly probable that *Toxoplasma* was responsible for the disease in each case.

Signs and symptoms most frequently mentioned in the literature, other than those related directly to lymphadenitis, were fatigue, muscle pain, fever, and headache. Splenomegaly, sore throat, and abdominal pain have also been referred to. It has been suggested that the latter condition might be caused by mesenteric adenitis.

Beverley and Beattie⁸ estimated that in their experience seven per cent of clinically diagnosed cases of infectious mononucleosis with a negative Paul-Bunnell reaction were in fact toxoplasmosis. Remington¹⁴ studied a group of college students diagnosed clinically as having infectious mononucleosis and established that *Toxoplasma* was the cause of the disease in two of 41 students not having heterophil antibody.

Involvement of lymph nodes in the cervical region has been reported most frequently, but involvement of nodes in the head and in the axillary and inguinal regions has also been common. In the majority of cases the clinical course is benign, with subsidence of signs and symptoms and a return to normal within a few weeks. However, lymphadenopathy, and occasionally fatigue, may persist for several months. Obviously, the diagnosis of toxoplasmosis in persistent lymphadenopathy will help to rule out malignant disease.

Ocular toxoplasmosis: Invasion of the human eye by *Toxoplasma* was first discovered in a congenital case of toxoplasmosis,¹⁵ and since has become a recognized cause of congenital eye disease. Furthermore, toxoplasma infection is thought to be one of the most important causes of chorioretinitis.¹⁶⁻¹⁸ A large proportion of such cases are probably noncongenital or "ac-

quired."^{16, 18} Unless disease is severe enough to warrant enucleation and subsequent isolation of the parasite, diagnosis of acquired ocular toxoplasmosis is usually only presumptive. Nevertheless, inflammatory lesions primarily in the retina, with secondary choroidal reaction, in the absence of obvious etiology, have a high probability of being caused by *Toxoplasma*.

Ocular disease may result from asymptomatic infection with the formation of cysts in the retina and their subsequent spontaneous rupture.^{16, 19} In some instances ocular disease may follow severe acute toxoplasmosis.¹⁸ Reports of the simultaneous occurrence of ocular disease and mild lymph node disease however are rare.^{20, 21}

Other forms of acquired toxoplasmosis: Cases of acute and often severe toxoplasmosis accompanied by fever, rash, and lymphadenopathy have been reported. Siim⁷ has referred to this condition as a typhus-like illness, and several such cases were the result of laboratory acquired infections.²²⁻²⁷ Acquired toxoplasmosis primarily involving the central nervous system has also been recognized.^{28, 29} In addition, there have been reports of acquired toxoplasma infection producing myocarditis,^{30, 31} pericarditis,³² polymyositis,³³ and hepatitis.³⁴ In some of these cases the diagnosis of toxoplasmosis was presumptive only. However, the involvement of *Toxoplasma* in at least two cases of disease similar to viral hepatitis has been well documented.³⁴

Of current interest are cases of generalized toxoplasmosis associated with organ transplants³⁵ or malignancy.³⁶ In such cases, chronic toxoplasmosis may have been reactivated by immunosuppressive agents or by suppression of immunity from malignant disease. In organ transplants, there is also the possibility of the transplanted organ containing *Toxoplasma*.

Congenital toxoplasmosis: Congenital toxoplasmosis is widely recognized because severe disease often results. Depending on the age of the child, and the stage of pregnancy when infection was transmitted, one or more of the following clinical manifestations may be seen: encephalitis, rash, jaundice and hepatosplenomegaly, hydrocephalus,

microcephaly, chorioretinopathy, convulsions, psychomotor retardation, and cerebral calcifications.^{37, 38} An even more diverse clinical spectrum of congenital toxoplasmosis has been emphasized recently.^{39, 40}

In France, about 40% of infants born to women with toxoplasmosis are infected, and disease manifestations appear in 30 to 50% of these.³⁹ It is of interest that only one case of congenital toxoplasmosis has been reported in Hawaii.

Spontaneous abortions and reproductive failures have been attributed to *Toxoplasma*, or at least this parasite has been highly suspect,^{41, 42} but a direct causal relationship has not been established in humans.⁴³ However, in sheep, abortion caused by *Toxoplasma* is an important veterinary problem in some countries.^{44, 45}

Laboratory diagnosis: The Sabin-Feldman dye test⁴⁶ remains the most widely used and accurate serologic test for the laboratory diagnosis of toxoplasmosis, although other serologic tests are in use and of value. It has been determined in cases of laboratory-acquired infections that dye-test antibody (analogous to neutralizing antibody) may appear as soon as five days after onset of illness (9-11 days after exposure) or as long as one month after onset of illness.^{24, 26, 27} Usually, however, high titers appear rapidly and may persist for a year or longer.^{26, 27, 38} Antibody titer then diminishes slowly and antibody may be detectable for life.^{1, 4} Because of the usually rapid dye-test antibody response, a significant rise in the level of this type of antibody is difficult to demonstrate. In this regard, testing for CF antibody may be useful since it appears considerably later than dye-test antibody and also disappears earlier.⁷ It should be emphasized that a stable, high dye-test antibody titer is not diagnostic in itself, but only suggestive of recent infection.

Isolation of *Toxoplasma* by inoculating infected tissue into mice is frequently successful and should be employed whenever possible. Occasionally this parasite has been isolated from peripheral blood but this procedure cannot be depended upon. *Toxoplasma* may be seen in various tissues, particularly in generalized disease, yet they are rarely demonstrated in sections of lymph node. Caution should be exercised in making a diagnosis based only on the presence of *Toxoplasma*-like objects in fixed tissue.

Treatment: The specific treatment of toxoplasmosis with pyrimethamine and sulfonamides has been well studied and shown to be effective.^{16, 25, 26, 27, 47, 48}

Epidemiology and transmission: With the exception of congenital disease, the method by which

humans become infected with *Toxoplasma* remains largely unknown. It has been clearly shown that infection in both man and animals may result from the consumption of raw flesh containing *Toxoplasma* cysts. In fact, one of the Hawaii patients admitted eating raw hamburger and raw chicken two and four months before the onset of lymphadenopathy. However, in man, only a minority of cases can be explained on this basis. Human-to-human transmission can be ruled out on epidemiologic grounds, leaving lower vertebrates as the probable reservoir of human infection.

The incubation period for toxoplasmosis in man has been determined only in laboratory-acquired infections, where accidental inoculation with *Toxoplasma* has taken place. In some such instances, the incubation period was as short as four or five days.^{24, 27} Obviously, however, this type of exposure is unusually severe, and the incubation period in naturally acquired infection is probably much longer. The route of infection in naturally acquired disease is unknown, but the oral or respiratory path appears likely—at least in glandular toxoplasmosis.

Toxoplasmosis in six of the 11 cases was undoubtedly acquired in Hawaii. It is questionable that infection in two cases, wife and husband, was acquired in Hawaii, since disease in one of these patients appeared within two weeks after they arrived from the mainland. Furthermore, and of particular interest, onset of apparent illness in the other patient was about three weeks later. Such closely related cases have seldom been reported; yet, there were two other cases in the Hawaii group that were closely related in time and place. One, a child of six, became ill about five weeks after illness was noted in her eight-year-old sister. The other members of this family, an infant boy, a seven-year-old girl, and their parents were followed serologically for about eight months, but none developed antibodies. Two of the patients with chorioretinitis were lifelong residents of Hawaii and undoubtedly acquired their disease here. The other patient had resided in Hawaii for only two months prior to onset.

Each of the Hawaii patients had been in contact with some type of animal, at least occasionally; close contact with birds (doves, pigeons, or pet birds) was reported in all but two cases. The significance of birds in the transmission of *Toxoplasma* is unknown.

Serologic surveys of some of Oahu's residents indicate that about 60% of adults born and raised in Hawaii have been infected with *Toxoplasma* some time in their lives.⁴ Similar surveys on the mainland USA have generally revealed a much

Hearing impairment is a common, serious affliction of the elderly, and it could be managed better than it is.

Hearing Impairment in the Aged: Incidence and Management

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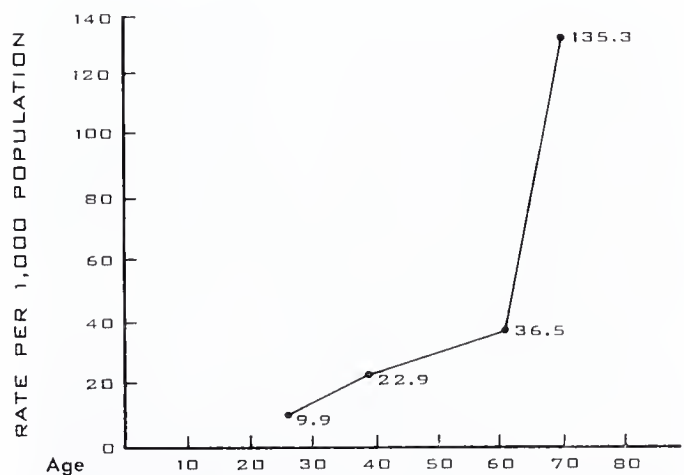
● *Nearly one out of every ten persons over 50 years of age is hard of hearing to some degree. This usually results in a serious handicap that all too often is neglected through failure to appreciate its presence, its seriousness, or the proper approach to its management. Complete audiological evaluation should be done, followed by hearing aid evaluation, training in lipreading if needed, and counseling of family and friends.*

THE PREVALENCE of hearing impairment rises rapidly with age. According to the statistics of the Metropolitan Life Insurance Company,¹ the rate increases from 7.6 per thousand population at 25 years of age and under, to almost 130 per thousand for age 65 to 74 and to over twice that at age 75 or over. Three and one-third million, or nearly half, of all persons with impaired hearing are 65 years of age or over.

According to the health survey conducted in 1959² on the island of Oahu, approximately 10,300 persons reported hearing impairments. This gives a rate of 22 cases per 1,000 population. The rate of hearing impairment reported by

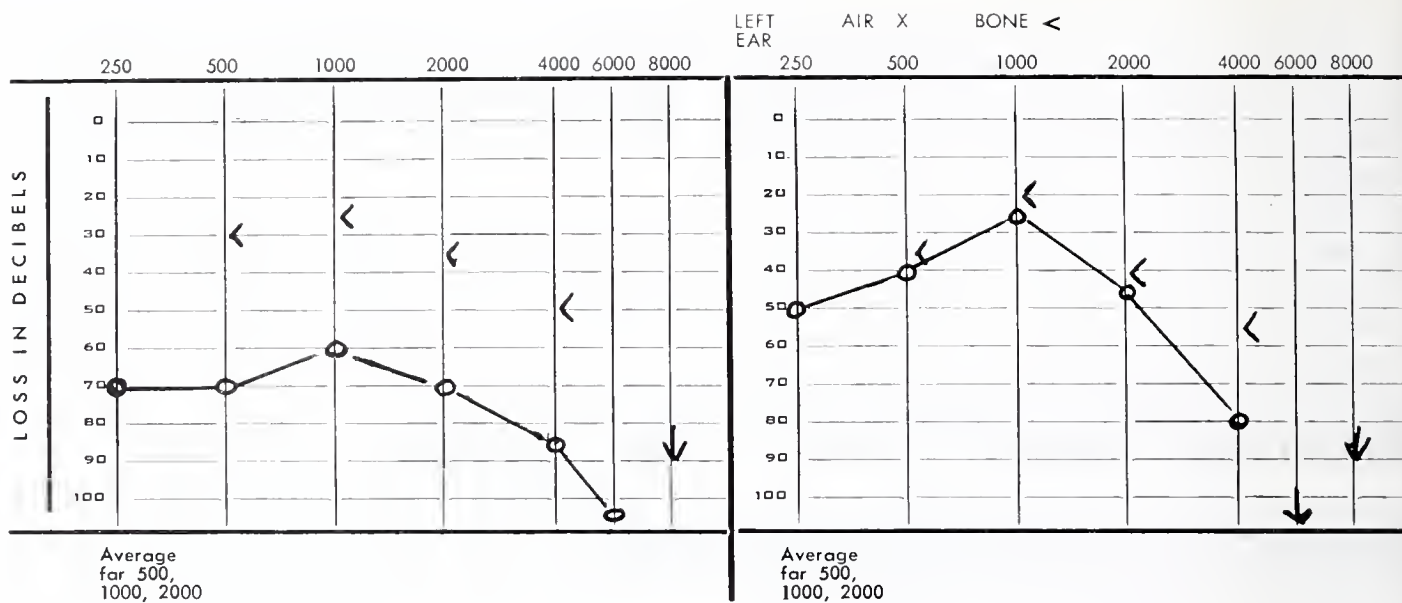
age groups is shown in Graph I. After a gradual rise up to age 64, there is a sharp increase in the age group 65 years or over, to 135.3 per 1,000 population. This corresponds to the pattern on the mainland United States.

Other pertinent factors appear from this survey, such as the variation of hearing loss in the ethnic groups. The rate per thousand population among



GRAPH I.—Hearing impairments reported by age in Health Survey, Oahu, Hawaii, October, 1958, to September, 1959.

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GRAPH 2.—Hearing levels before (left) and two years after (right) stapedectomy.

the Caucasians is 168.4, in the Japanese 140.4, and all other groups 97.0. Men are more prone to hearing impairment than women. This higher rate among men probably reflects their greater involvement in accidents as well as their more frequent exposure to prolonged intense noise in industry. About 10 percent of hearing impairments among men stem from an injury, while among the women the proportion is only four percent.

The hearing impairments of old age may be broadly grouped and characterized as (1) conductive, (2) receptive, and (3) perceptive. Bordley³ stresses that the organic bases that cause severely impaired hearing in elderly people result from the accumulations and degenerations of a lifetime and are seldom due to a single lesion.

The common causes of conductive impairment in the aged are similar to those of other age groups. They are middle ear diseases and otosclerosis. These lesions may have actually existed for many decades, but it is only after the aging process has been added to the toll that a serious hearing handicap develops. Surgical correction of these problems is indicated in the aged as long as general health permits. If otosclerosis is present in the elderly, surgery in the form of stapedectomy may still be effective in restoring hearing. This is typified by the following case.

A 79-year-old Caucasian woman had been hard of hearing since the age of 35 years. The hearing loss had been gradual and progressive. In 1958, at the age of 76, she had a stapes mobilization in the left ear, with only temporary improvement. Audiograms revealed a hearing loss of 53 dB in the speech range in the right ear and 67 dB in

the left ear. Speech audiometry revealed a speech reception threshold of 56 dB in the right ear and 70 dB in the left ear. The discrimination scores were 96 percent in the right ear and 78 percent in the left ear. Diagnosis: Moderately advanced otosclerosis with nerve degeneration. She wore a hearing aid very well in the right ear.

On April 17, 1967, a stapedectomy was performed in the left ear, using prefabricated stainless steel wire as the prosthesis. Two years later, the hearing in the left ear was 37 dB, a gain of 30 dB. (Graph 2) She now can carry on normal conversation without a hearing aid but uses the aid when she attends a lecture or movies.

However, the otologist must use caution in advising surgery for the aged, depending on the configuration of the sensorineural loss. It must be remembered that a patient with a flat audiogram and with relatively good discrimination will usually respond well to a hearing aid. The surgeon is not doing the patient a favor if he leaves that patient with a severely sloping audiogram that distorts speech. This distortion factor must be evaluated along with the other audiological findings in determining the advisability of surgery.

Of all the forms of ear diseases and deafness seen in the general population, there is a specific hearing disability among older people directly related to the changes in the pathophysiological process of aging, known as presbycusis. It occurs in from seven to ten percent of the population past 50 years of age.⁴ Although the exact cause of presbycusis is unknown, it is probably related to the physical and chemical changes which cause the rest of the body to age, such as deterioration

of the skin, eyes, and mental processes. It is also quite probable that this deterioration in the hearing may be accelerated by exposure to industrial and other noises. Rosen et al⁵ have produced evidence that in the Mabaan tribesmen of Sudan, where there is little exposure to loud noises such as found in industrial society, the incidence of presbycusis, high blood pressure, and other degenerative processes is much lower. Pure tone audiometry administered to 541 primitive tribal people of Sudan, age 10 to 90 years, revealed much better high-frequency hearing ability with age as compared to similar test findings on people living in our modern western civilization. There also was an absence of high-tone loss with aging in the Mabaans.

Audiologically, hearing loss in the aged is typically characterized by a sloping audiogram with the hearing acuity diminishing in the higher frequencies. This hearing loss is often binaurally symmetrical. The pure-tone audiogram in the presbycusis tells us very little of the real auditory problem of the aged. Far more important is the discrimination problem, which is often inordinately severe in relation to the pure-tone loss. Thus patients will tell you, "I can hear you but I cannot understand." Speech audiometry, therefore, is an imperative measurement in the investigation of such impairment. In speech audiometry, speech reception threshold (SRT) for spondee (two-syllable words) is generally close to the average responses for pure tones at 500, 1,000, and 2,000 Hz. Maximum speech discrimination, which is usually obtained at 30 dB above the SRT, is generally 60 percent or less and is thus inordinately low in relationship to the speech reception threshold. This latter phenomenon has been called phonemic regression (Carhart) and is attributed to damage in the brain rather than in the ear. This hearing syndrome is generally recognized as presbycusis and is believed by many to be typical of those losses caused primarily by degenerative changes in the brain.⁶

To understand what effects raised speech reception threshold and poor discrimination have on the everyday life of an individual, one must understand the various levels of hearing. This understanding is important for the physician in counselling the hearing-impaired and also for the patient in order that he may cope psychologically with the hearing loss. Ramsdell⁷ described three primary levels into which normal hearing can be divided. The first level is the "symbolic level." At this level we hear and understand language. We know that words represent objects, activities, and feelings around us.

At the second, the "signal" or "warning" level, we get a direct sign or signal of an event, to which we then make an adjustment. At this level are sirens, the barking of a dog, the buzzing of a bee. These are not symbols, but signals. For example, we pull our car to the side of the road, not because someone yells out "fire truck" (the symbol) but because we hear the siren (the signal).

At the third, or "primitive," level we find sound that is neither a symbol nor a signal but simply the "auditory background" of daily life. At this level we almost unconsciously react to such sounds as the ticking of a clock, the movement of people all around us, or the faint hiss of the fluorescent light. Here we receive what psychologists call "affective tone," the feeling of life. Noises at this level are constantly informing us of what is going on around us. We have all experienced unexplainable discomfort when suddenly everything is silent. We are forced to investigate by looking around for an explanation to again gain that "feeling of life."

Because this third level is not often brought into consciousness, it is important here to consider it in depth. It is important because it is the first level that is missed when a person loses his hearing. Depression in the deaf is the extreme response to this loss of contact at the primitive level. When a person loses his hearing the world seems dead, and because the primitive level is so seldom brought into consciousness, he is at a loss to know why he feels as he does. These frustrated individuals certainly can be helped by counseling. For example, many deafened individuals substitute muscle movement for the loss of awareness on the primitive level. The person can be counseled to involve himself in an avocation or hobby to fill the silence and the leisure hours. By keeping active physically he can keep in touch with life and with feeling.

Besides difficulty involving the primitive level, the aged patient often suffers from various degenerative changes in the neuro-auditory pathways and from an altered outlook on life. Hearing loss gives tremendous stimulus to latent paranoiac tendencies. The patient must be counseled toward a mature attitude, to understand that the conversation across the room is not necessarily, and certainly not usually, about him. This is particularly true with the aged person whose only form of recreation may be communication. A loss of this communication adds the last straw to his loneliness, isolation, and insecurity. Many of these patients react by going into seclusion and many lose the will to try to overcome their handicap. They develop a negative attitude and come to the

otologist expecting to be told that nothing can be done to help them. Even worse, they are often mentally prepared to accept such a statement; in fact, many of them have already been brainwashed toward this thinking by their friends. They believe that the hearing loss will progress despite every effort to avert it and become an incapacitating handicap. This latter misconception has often been fostered by otologists who do not fully sense the problems presented by this group of patients. It is up to the otologist to reverse this attitude of depression and build up an attitude of optimism, or at least an attitude of willingness to try. Patients must be reminded that they are not going completely deaf.

The physician's concern, however, should not end with the patient. The family too must be cognizant of the patient's problems. The family and friends should be counseled to make compensations to this patient by

- (1) gaining his attention before speaking to him,
- (2) speaking to him at a reasonable distance (two to six feet is ideal),
- (3) facing the patient when talking to him, and
- (4) not talking to him when there is background noise such as a running faucet, etc.

Hearing loss in presbycusis, although not necessarily progressive, is irreversible. In addition to counseling, these people need to have positive steps taken toward rehabilitation. Two vital elements of such rehabilitation will include hearing aid evaluation with auditory training and speechreading. Not all presbycusis individuals, unfortunately, can be helped by hearing aids, because of the aforementioned problem of phonemic regression. If the brain deterioration is present, introduction of amplified speech will only serve to accentuate the confusion. But a hearing aid should never be ruled out merely because of a sloping audiogram. Proper evaluation should be offered, which is best conducted by an otologist and audiologist. It is fortunately becoming the practice in larger cities for hearing aid dealers to supply hearing aids to audiologists at various clinics. The evaluation is thus done impartially by the audiologist on the basis of which aid is likely to give the most benefit to the patient.

On this recommendation the patient is free to choose the dealer of his choice among those who handle that particular aid, and finally to make his purchase. Ideally, the audiologist would like to write a prescription for an aid, specifying such factors as type of response, maximum output, etc. The patient would then take this prescription to

the company of his choice and purchase an aid that fills his needs. Unfortunately, this is technically unsound at present, because hearing aid manufacturers have not reached a standard of sophistication that would allow such a prescription to be filled by every company. It is the duty of the audiologist not only to fit a person to a particular aid but also to recheck the person, after he has his own aid, to see that the purchased aid has the same responses as the one used in testing. This follow-up procedure is most important for the aged individual, for it must always be remembered that in fitting an aid, one is putting an imperfect instrument (the hearing aid) on another imperfect instrument (the impaired ear). Several sessions with the audiologist may be in order to insure that the patient learns to use the aid in the proper manner so that the costly instrument does not end up in the top bureau drawer.

Even after the selection of the best aid for a particular ear is made, other psychological problems may enter to confound the hearing-aid fitting. It is often necessary to consider the cosmetic aspects of a hearing aid. One may have to compromise over the type of aid used, depending upon the culturally determined attitude of the patient. Again, it must be kept in mind that no hearing aid can help unless it is worn and used. A trial period of hearing-aid use may be necessary for some geriatric patients. An intensive period of individual or group auditory training conducted by the audiologist may also be necessary in many instances. After this trial period, the benefits of the aid would be evaluated by the patient and his family, and only then would the decision regarding the ultimate purchase of the aid be made.

Whether or not a hearing aid is in order, "speechreading" is a must. The new term speechreading is used because visual help in communication comes not only from watching the lips, but from observation of facial and bodily patterns and movements as well. Speechreading is also meant to include training that will sharpen the patient's observational techniques so that he may quickly grasp conversational trends. It is important that the physician realize the scope of speechreading. Too often, speechreading or "lipreading" is advised, but the patient does not follow through because of misconceptions and faulty wording of the recommendation. It must be made clear to the patient that this involves more than just "watching the lips"—that this is not something only "deaf" people do. How many times have we changed seats in an auditorium to see the speaker? We do this despite the fact that we hear sounds as well behind the post where we cannot

see. The eyes give even the normally hearing individual additional information to support what his ears tell him.

It should be borne in mind also that hearing-impaired adults have many misconceptions about their impairment, thus producing a greater handicap than is necessary. Too often, because they feel that "only deaf people" watch lips, they purposely avoid watching the speaker. These people need to be reassured that speechreading is not "staring at the speaker's lips," and that with training the eyes will give much information regarding the topic of conversation and specifics of each bit of communication.

The successful rehabilitation of the presbycusis patient requires the combined skills, patience, and understanding of a combination of specialists. At the level of the patient this means proper audiological and otological evaluation and treatment, the latter encompassing medical, surgical, speechreading, hearing aid evaluation, auditory training, and psychological counseling as required.

It must be emphasized strongly that one cannot omit the patient's family from counseling and expect the rehabilitation process to be complete. Compensations must be made by all who are intimately involved with the patient. If properly counseled, all will find communication more pleasant and consequently life more livable.

The outreach of the specialist dealing with geriatric audiological problems must also encompass the general public. Potentially, our entire population will at some time be faced with the problems of hearing loss. As life is prolonged, hearing loss combined with other geriatric problems is inevitable to all of us. The public today is sadly uninformed regarding hearing loss and its related problems. An increasing number in our society can and will live a full life only if *all* are cognizant of the handicap imposed on people with hearing loss.

SUMMARY AND CONCLUSION

Despite all the special social welfare and medical programs advanced for the aged, the hearing problems of the aged have been neglected. This is unfortunate because with the aged the only form of creation may depend upon communication. This loss of communication adds the last straw to their loneliness, isolation, and insecurity. Many react by going into seclusion, or even develop mental and psychological aberrations, and become problems to the family and friends.

The specific hearing disability among older people known as presbycusis is directly related to the process of aging. It occurs in seven to ten percent of the population past the age of 50 years.

The rehabilitation of these unfortunate people depends upon the cooperative efforts on the part of the otologist and audiologist. It consists of (1) a complete audiological evaluation; (2) a hearing-aid evaluation and the recommendation of a suitable hearing aid if indicated; (3) auditory training in speechreading (lipreading); (4) counseling of the patient; (5) counseling of the immediate family, relatives, and friends; and finally, (6) the education of the public to the problems of these unfortunate individuals.

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*Cardiopulmonary resuscitation can be lethal—
as well as, paradoxically, lifesaving. Do it gently!*

Cardiopulmonary Complications of External Cardiac Massage

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• *The incidence of cardiac rupture and pulmonary bone marrow embolism was studied in cases subjected to external cardiac massage. There were nine cases of through-and-through cardiac rupture, with hemopericardium and cardiac tamponade, in 90 autopsied cases of acute myocardial infarction. Six of these cases were in the group of 41 patients who died of an acute myocardial infarct and who had been subjected to external cardiac massage, an incidence of 14.6 percent.*

Of the total of 86 autopsies performed in those cases that underwent external cardiac massage, 31 cases, or 38.3 percent, showed pulmonary bone marrow emboli. A positive correlation between the severity of the embolism and the duration of revival is suggested.

It is recommended that no more pressure be exerted during external cardiac massage than is required to produce a palpable, full femoral or carotid pulse.

EXTERNAL cardiac massage is an accepted major procedure in the therapy of cardiac arrest, but recently it has been implicated in a wide variety of complications. Those reported include fractures of the ribs and sternum,^{1,2} ruptures of the liver^{1,2} and stomach,^{2,3} hemothorax and pneumothorax^{1,2} and pulmonary fat and bone marrow embolism.⁴⁻⁸ Following the institution of an organized program for cardiopulmonary resuscitation at the Kuakini Hospital, increased incidence of pulmonary bone marrow embolism and of cardiac rupture have been found in routine autopsies.

This study was undertaken to determine the incidence of cardiac rupture and of pulmonary bone marrow embolism following external cardiac massage at this hospital.

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Presented at the American College of Physicians Thirteenth Regional Hawaii Meeting, Honolulu, Hawaii, February 18-19, 1969.

METHODS AND RESULTS

All autopsies performed at the Kuakini Hospital during a 33-month period between January 1, 1966, and September 30, 1968 were reviewed, and cases were selected and classified as follows:

Death due to acute myocardial infarction with cardiac rupture: An acute myocardial infarction was the cause of death in 90 autopsied cases. There were 60 men and 30 women, aged 31 to 92 years. There were nine cases of cardiac rupture—an over-all incidence of ten percent—following an acute myocardial infarction. Cardiac resuscitation had been attempted in 41 of the cases; six of these sustained a ruptured myocardium, for an incidence of 14.6 percent in cases subjected to external cardiac massage. The remaining three cases of rupture represent an incidence of 6.1 percent in cases without external cardiac massage.

All autopsies performed in this hospital during the seven years from January 1, 1959, through December 31, 1965, were also reviewed in order to provide data for a comparative study. There were three cases of cardiac rupture among 71 patients whose primary cause of death was an acute myocardial infarction, for an incidence of 4.2 percent. None of these cases had external cardiac massage (Table 1).

TABLE 1.—Ventricular rupture.

	1966-68	1959-65
Total cases with acute myocardial infarction	90	71
Without massage	49	71
With massage	41	0
Total cases with rupture	9 (10.0%)	3 (4.2%)
Without massage	3 (6.1%)	3 (4.2%)
With massage	6 (14.6%)	0

All ruptures in this series were complete, through-and-through ventricular tears, with hemopericardium and cardiac tamponade. Small incomplete tears of the ventricle and ruptures of the septum were not included. All nine cases in the present series showed several things in common. There was a hemopericardium of approxi-

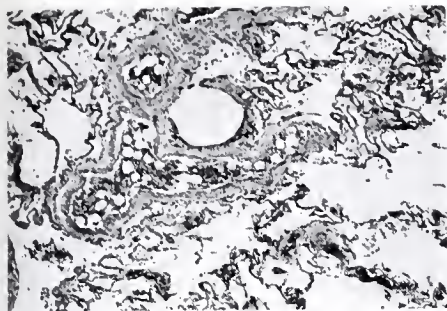


FIG. 1.—Bone marrow embolus in pulmonary artery (H & E, 48 ×).

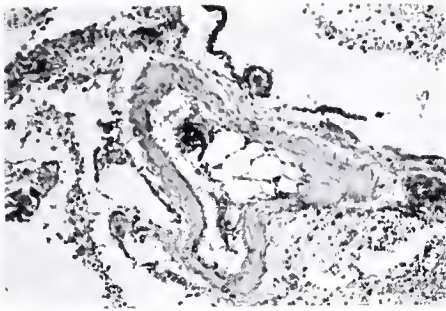


FIG. 2.—Marrow embolus with metastatic oat-cell carcinoma of lung (H & E, 120 ×).

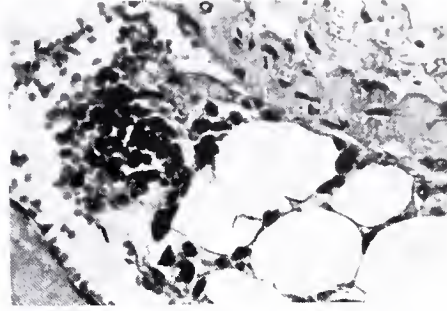


FIG. 3.—Higher magnification of metastatic oat-cell carcinoma (H & E, 480 ×).

mately 400 ml. Each case showed a through-and-through complete tear of the left ventricular myocardium in an area of necrosis. The tears were irregular, with hemorrhagic edges; the surrounding myocardium was soft, with many hemorrhagic zones; and a few showed yellow foci. The area of rupture was at the apex in four cases, near the AV sulcus in three cases, and about midway between the AV sulcus and apex in five cases (Table 2).

In all cases subjected to external cardiac massage, except in one which expired on the ninth day, death occurred within four days after the acute episode of myocardial infarction. In the nonmassaged cases, death occurred after the fourth day following the episode, except for one which was dead on arrival. Of the three cases of rupture recorded during the period 1959-1965, all died after the fourth day following the acute episode.

Pulmonary bone marrow embolism: During the 33-month period, there were 86 autopsies performed on cases that had undergone external cardiac massage. Many of these cases had been subjected to one or more resuscitative attempts, but

expired at varying intervals after the initial episode of cardiac arrest. Random sections of the lungs taken at autopsy were examined for bone marrow emboli, which consisted of both adipose tissue and blood-cell forming elements (Fig. 1). Thirty-three cases, or 38.3 percent, showed such emboli. Those cases with only fat emboli, usually in the alveolar capillaries, were excluded. An interesting finding was a case of oat-cell type of bronchogenic carcinoma with bone metastases that had a bone marrow embolus containing a focus of metastatic carcinoma in a pulmonary artery (Fig. 2 and 3).

There was no histologic correlation between the presence of emboli and atelectasis, congestion, edema, hemorrhage, pneumonia, or fibrosis. The degree of severity of bone marrow embolism was evaluated against the period of revival after the initial episode of cardiac arrest (Fig. 4). The degree of bone marrow embolization was evaluated by an arbitrary grading system as follows:

- A: 0 = No emboli found.
 1 = Occasional emboli found.
 2 = At least one embolus per section.
 3 = More than one per section but less than one embolus per microscopic low-power field.
 4 = Many emboli with at least one per low-power field.
- B: 1 = Embolus in small pulmonary artery.
 2 = Embolus in medium sized artery.
 3 = Embolus in large artery.
 4 = Embolus in main branch of pulmonary artery.

The degree of severity for each case was graded as the product of A x B and therefore depended upon the number of emboli and the size of the vessels involved (Table 3).

DISCUSSION

The ten percent incidence of cardiac rupture in this series as a natural complication of acute myocardial infarction is higher than a number of those reported in the literature (Table 4), even though cardiac rupture in this series was defined as a complete, through-and-through tear of the

TABLE 2.—Summary of ventricular ruptures.

CASE	TIME OF DEATH* (DAYS)	LOCATION OF RUPTURE
1†	¼	Posterior lateral left ventricle, 1 cm below A.V. sulcus
2†	1	Anterior left ventricle near septum and A.V. sulcus
3	11	Anterior left ventricle at apex
4†	½	Anterior left ventricle at apex
5	DOA††	Lateral left ventricle midway between apex and A.V. sulcus
6†	9	Anteriolateral left ventricle between midpoint and apex
7	8	Posterior left ventricle near A.V. sulcus
8†	2	Anterior left ventricle midway between apex and A.V. sulcus
9†	4	Lateral left ventricle midway between apex and A.V. sulcus

* Time of death after the acute episode of myocardial infarction.
 † Subjected to cardiac massage.
 ‡ Dead on arrival.

TABLE 3.—Summary of cases with pulmonary bone marrow embolization.

CASE	GRADE		DEGREE OF EMBOLIZATION (A X B)	TIME OF REVIVAL (HRS.)
	A	B		
1	1	1.5	1.5	3
2	2	3	6	1¼
3	2	2	4	½
4	1	1.5	1.5	½
5	1	2	2	3½
6	2	3	6	1
7	3	3	9	½
8	1	1	1	38½
9	1	1	1	57
10	2	2	4	26½
11	1	2	2	65½
12	1	2	2	26½
13	3	2	6	24¼
14	1	3	2	½
15	1	1	1	46½
16	1	1	1	13¼
17	2	2	4	164½
18	1	1	1	42½
19	1	3	3	3¼
20	1	3.5	3.5	26
21	2	1	2	54
22	3	3	9	½
23	1	3	3	3
24	1	2	2	16
25	1	1	1	24
26	2	1	2	27
27	1	1	1	3½
28	2	2	4	38
29	2	2	4	1
30	1	2	2	2
31	1	3	3	½
32	1	1	1	3
33	1	2	2	168

myocardium, excluding incomplete tears of the ventricles and ruptures of the septum which were included in many of the reported studies. The relatively higher incidence of cardiac rupture (14.6 percent in cases that had undergone external cardiac massage, as compared to 6.1 percent in those without massage during the 33-month period) strongly suggests that cardiac rupture resulted from this procedure. Although the possibility that rupture occurred prior to massage cannot be excluded, the much greater incidence of rupture in these cases suggests that this is not so.

Cardiac rupture has been reported to occur within one hour of, or as late as four weeks after, an acute infarction, the average being seven to eight days.^{17,18} The over-all shorter duration of life following the onset of an acute myocardial infarction in those cases subjected to external cardiac massage, as compared to the longer period in the unmassaged cases, indicates that the procedure may indeed be a factor in this complication of myocardial infarction.

Postmortem studies indicate that complete, through-and-through ruptures occur in the area of necrosis in the infarcted ventricle. In the unmassaged heart, ventricular systole may be the

TABLE 4.—Reported incidence of cardiac rupture in acute myocardial infarction.

SERIES	%
Edmondson & Hoxie ⁹	8.3
Oblath, Levinson, & Griffith ¹⁰	7.1
Wessler, Zoll, & Schlesinger ¹¹	7.0
Wright, Marple, & Beck ¹²	13.5
Aarseth & Lange ¹³	6.6
Kavelman ¹⁴	15.0
London & London ¹⁵	4.7
This Series	10.0

prime force in causing a tear through the weak necrotic wall. In cardiopulmonary resuscitative procedures, an effective massage requires the exertion of pressure on a relatively quiet heart, through direct compression of the sternum, and it must be firm enough to expel blood from the ventricles into the pulmonary and systemic circulations. This compressive pressure on the heart may be great enough to tear the already weakened infarcted area of the ventricular wall.

The reported incidence of pulmonary bone marrow embolism varied from 13 to over 50 percent.^{6,7} In our series, 38 percent of autopsied patients who had had external cardiac massage showed pulmonary bone marrow emboli.

No attempt at correlating the incidence of pulmonary bone marrow embolism with rib or sternal fractures was made in this study. Although bone marrow embolism has been attributed to fractures,^{5,16-18} other reports have emphasized that this pulmonary complication can occur in the absence of gross fracture.^{4,19-20} The marrow cellular elements have been described to be normally loosely attached in the intramedullary lining, and a contusion of the skeletal system, without a fracture, may dislodge fragments of bone marrow into the relatively patent medullary sinusoids.^{4,17-21} During cardiac massage, the compressive effects of the procedure on the sternum may detach bone marrow fragments, which then float into the systemic circulation and into the lungs.

The rapidity of pulmonary embolization after trauma has been emphasized by Rappaport.¹⁷ Embolization may occur within the first few minutes of cardiac massage. This is suggested in finding pulmonary bone marrow fragments in patients whose period of massage was only a few minutes prior to death. However, the clinical significance of bone marrow embolism depends on the extent and severity of the resulting vascular obstruction in the lungs. Massive pulmonary embolization causes acute right heart failure contributing to acute death.^{2,17} When the emboli are small and diffusely scattered, localized tissue reaction, hemorrhage, and edema occur, and eventually pulmonary congestion and respiratory failure super-

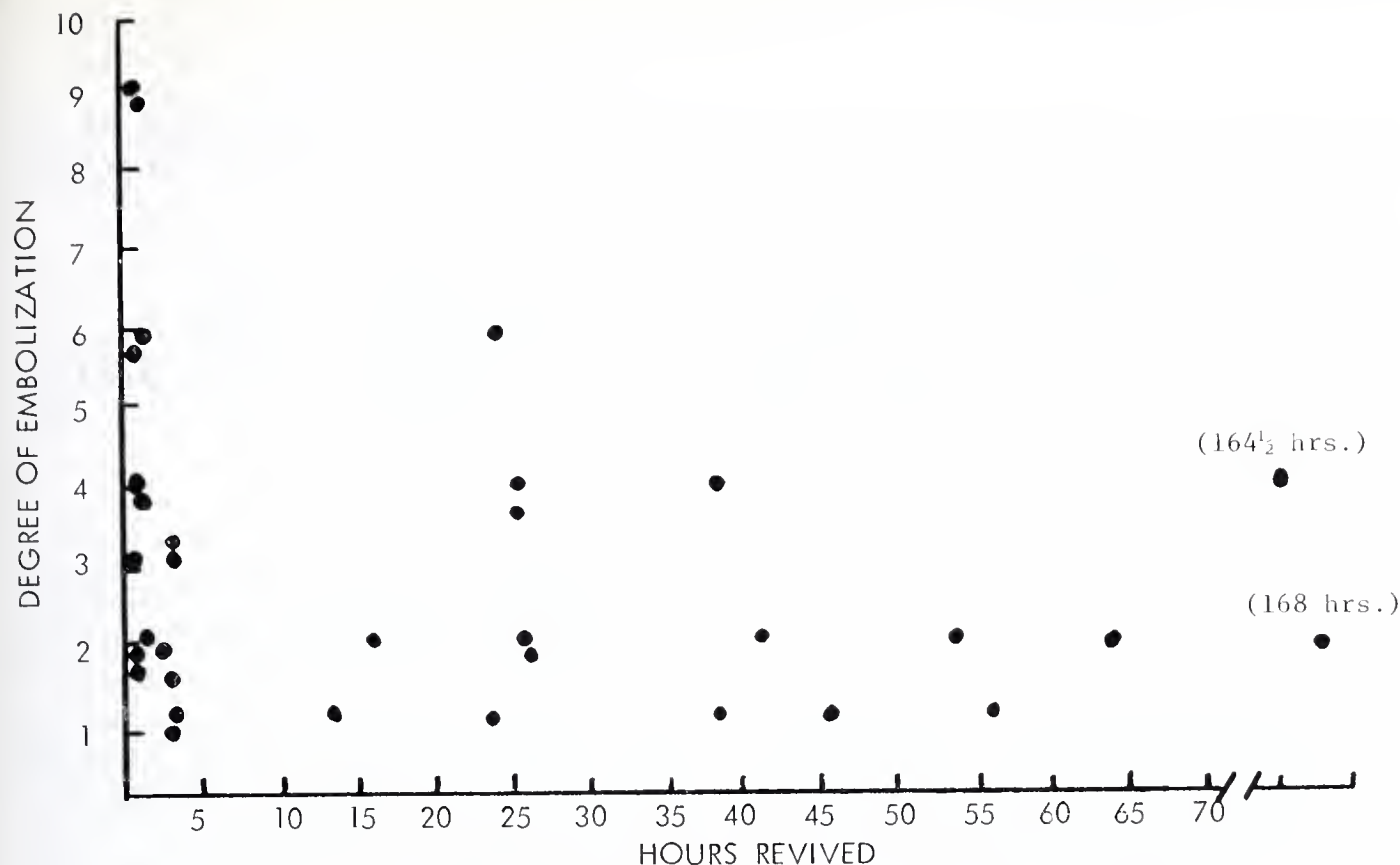


FIG. 4.—Period of survival evaluated against severity of bone marrow embolization.

vene. Thus pulmonary bone marrow embolization may cause a significant impairment of the pulmonary circulation acutely or gradually and may be a primary factor in the failure of a number of cases undergoing cardiac massage.

A number of these cases had been subjected to several attempts at cardiopulmonary resuscitation and the time of pulmonary embolization cannot be definitely established, such as in cases 17 and 33, who were repeatedly revived during the periods of 168 and 164½ hours of survival respectively after the initial episode of cardiac arrest. Nevertheless, when the period of revival was evaluated against the arbitrarily graded degree of severity of pulmonary bone marrow embolization (Fig. 4), there was a suggested correlation between the severity of embolism and duration of revival. There no doubt were other factors which may have contributed to the failure in cardiopulmonary resuscitation, especially in several of the cases with only a mild degree of embolism.

Both ventricular rupture and pulmonary bone marrow embolism may determine the failure of cardiopulmonary resuscitation. External cardiac massage certainly should not be denied a patient because of the possibility of these complications. However, an effective massage technique with the least possible trauma should be used. A palpable, full, femoral or carotid pulse with each stroke on the sternum should be used as the end-point of the depth and pressure; a more vigorous effort is not only superfluous but may precipitate any of the reported complications, including cardiac rupture and pulmonary bone marrow embolism.

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*In thyrotoxicosis, serum IgG levels are up,
but the increase does not parallel increased LATS activity.*

Immunoglobulin Levels and Long-acting Thyroid Stimulator (LATS) in Hyperthyroidism

A Preliminary Study

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• *Immunoglobulin levels and LATS activity in patients with hyperthyroidism were determined. The mean level of IgG in the patient group was significantly higher than that of the normal control ($p < 0.001$).*

In this study, the higher IgG level was not found to be correlated with LATS activity.

THE SERUM of patients with hyperthyroidism has been shown to contain a substance which induces a markedly prolonged release of radioactivity from ^{131}I -labeled thyroid glands of iodine-deficient, thyroxine-treated animals.¹⁻³ This substance differs from pituitary thyrotropin (THS) and has been named "long-acting thyroid stimulator" (LATS). Recent studies have suggested that LATS may be an antibody because its activity can be found in the IgG fraction.⁴⁻⁶ These observations led us to question whether or not LATS may possibly affect the total IgG level in patients with hyperthyroidism.

MATERIALS AND METHODS

Blood samples were obtained from 29 patients with hyperthyroidism (4 male and 25 female, aged 11 to 57 years) and allowed to clot at room temperature. The sera were stored at -20°C . prior to use. Twenty of these patients were under drug or radioactive iodine therapy with varying states of euthyroidism or hyperthyroidism, while nine patients were untreated. Blood samples were obtained also from 78 normal individuals representing the same age and sex distributions. These were used as the controls.

The method used for the quantitative determination of each immunoglobulin level (IgG,

IgA, and IgM) was the single radial immunodiffusion technique reported by Fahey and McKelvey.⁷ LATS activity was determined by a method described by McKenzie⁸, and was considered positive when the radioactivity was significantly higher after eight hours ($p < 0.05$) than after two. Thyroglobulin antibody was tested for by latex agglutination (Hyland Laboratories, Los Angeles, California) and by Ouchterlony's double diffusion technique.⁹

RESULTS

The findings are shown in Table 1. The mean IgG value for the total number of patients ($p < 0.001$) was significantly higher than that of the control group. No significant variation from the control group was found in the IgA and IgM levels.

No thyroglobulin antibody was found by either the latex agglutination or immunodiffusion tests in this study.

Positive LATS activity was found in nine of the 29 patients. Those with negative LATS activity showed a significantly higher ($p < 0.01$) IgG level when compared with the positive LATS patients (Table 2).

DISCUSSION

LATS has been found predominantly in the serum of patients with hyperthyroidism.¹⁰ As mentioned above, recent works have indicated that LATS can be found in the IgG fraction and is considered a possible antibody. Various autoantibodies to thyroid tissue have also been found in hyperthyroidism.¹¹ These observations have suggested an underlying immunological disorder and, with this in mind, an attempt was made to see whether the IgG level could be correlated with LATS activity in patients with hyperthyroidism.

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TABLE 1.—Immunoglobulin levels and LATS activity in hyperthyroidism.

Sex	Age	LATS ACTIVITY (%)		IMMUNOGLOBULIN LEVELS (mg%)		
		2 HOURS		8 HOURS		IgM
		Mean	S.D.	Mean	S.D.	
1*	F	22	133 ± 28.4	224 ± 65.2	1480	115
2*	F	57	593 ± 91.0	1698 ± 227.0	1480	80
3*	M	36	109 ± 22.3	145 ± 23.3	1150	80
4*	F	13	114 ± 7.8	132 ± 8.3	1300	92
5*	F	24	145 ± 21.9	340 ± 60.3	1920	210
6*	F	17	258 ± 38.0	527 ± 116.0	1300	125
7*	F	19	85 ± 11.2	124 ± 25.8	1480	99
8*	F	26	206 ± 24.3	267 ± 51.5	1150	86
9*	M	46	124 ± 40.3	182 ± 33.0	1480	86
10.	F	16	124 ± 11.8	116 ± 21.8	1700	70
11.	F	50	91 ± 11.6	67 ± 24.8	1920	80
12.	F	25	123 ± 17.5	112 ± 30.6	2800	86
13.	M	28	100 ± 7.7	96 ± 8.0	1700	145
14.	F	17	177 ± 17.2	143 ± 45.0	1920	155
15.	F	44	97 ± 19.5	141 ± 78.2	1920	86
16.	F	22	149 ± 27.8	140 ± 43.2	1480	195
17.	F	16	100 ± 8.7	118 ± 18.0	1700	180
18.	F	42	105 ± 6.3	99 ± 6.8	1480	99
19.	F	25	152 ± 64.1	156 ± 88.3	1480	99
20.	M	27	109 ± 18.9	126 ± 32.6	1480	80
21.	F	11	107 ± 15.5	109 ± 20.4	1480	167
22.	F	31	102 ± 27.4	83 ± 20.9	1150	107
23.	F	37	132 ± 10.8	133 ± 18.3	1700	134
24.	F	32	116 ± 17.5	112 ± 24.3	680	107
25.	F	50	105 ± 15.0	104 ± 27.2	1700	145
26.	F	14	95 ± 23.3	97 ± 26.2	1700	64
27.	F	27	98 ± 11.2	76 ± 16.1	1480	145
28.	F	35	95 ± 20.9	64 ± 13.5	1700	226
29.	F	31	103 ± 19.9	108 ± 38.4	1480	80

* Demonstrated positive LATS activity.

MEAN ± S.D.	1565.2 ±362.4	320.1 ±101.2	118.0 ±44.2
NORMAL 78 CASES	1151.4 ±356.0	265.5 ±119.8	107.6 ±47.9
SIGNIFICANCE	P<0.001	N.S.	N.S.

TABLE 2.—Comparison of immunoglobulin levels in patients with positive and negative LATS activity.

LATS ACTIVITY	IgG	IgA	IgM
Positive 9 cases	1415.6 ± 234.2	304.9 ± 107.1	108.1 ± 41.3
Negative 20 cases	1812.5 ± 398.3	326.9 ± 100.6	122.5 ± 45.7
Significance	P<0.01	N.S.	N.S.

Although the average IgG level in the diseased group was higher than in the normal controls, sera with positive LATS activity did not show a higher IgG level when compared with those of negative LATS activity. Considering the great number of different antibodies which compose an individual's IgG, we thought LATS activity might possibly be carried on a small number of IgG molecules. In addition, thyroglobulin antibodies were tested in order to eliminate the contribution of other thyroid antibodies to the total IgG. No thyroglobulin antibodies were found in this series.

Further studies will be necessary to determine the factors which raise the IgG level in patients with hyperthyroidism.

Although the present number of samples studied was small, it is possible to conclude that LATS does not contribute to raising the serum IgG level.

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Hawaii Health Fair --- 1968

INTRODUCTION

The First Hawaii Health Fair was held in October, 1965, under the sponsorship of Hawaii Medical Association. Dr. John R. Stephenson was chairman. Many felt this was one of the most successful events ever held at the Honolulu International Center. It was aimed at approximately 10,000 people and about five times that number attended. The event proved that public health education is important and has the interest of the community.

Since this event was deemed to be mainly a function of Honolulu, the House of Delegates in 1966 accepted the recommendation to transfer this function from Hawaii Medical Association to the county medical societies. Preparations for the second Hawaii Health Fair in Honolulu were begun early in 1967. The Health Fair Committee was appointed by George H. Mills, M.D., who was then President of Honolulu County Medical Society. Members were Paul Y. Tamura, M.D., Chairman; O. D. Pinkerton, M.D.; Don E. Poulson, M.D.; William S. Ito, M.D.; John R. Stephenson, M.D.; Robert C. H. Chung, M.D.; Wilbur S. Lummis, Jr., M.D.; Charles F. Aquadro, M.D.; Dermot J. Ornelles, D.D.S.; James R. Bunker; Charles L. Malang; and Orval D. Williams. In the light of the experience of the first Fair, the committee felt, almost unanimously, that we could expect an attendance of at least 100,000 people. An opportunity for exposure to such a large segment of our population could not be taken lightly. Accordingly, we reserved the arena as well as the exhibition hall, assembly hall, and meeting rooms of the Honolulu International Center to accommodate wider participation and the larger attendance. At the outset, also, we decided on two basic guidelines or principles: (1) emphasis on quality and content of exhibits, and, (2) no commercialism.

THE MESSAGE

The theme selected was *Health Through Knowledge—Learn to Live*. There was a message for everyone.

(1) For the apparently well person awareness leads to early detection. Detection of even the most serious disease with adequate treatment may be curable. Serious disease in its incipient stages may occur in individuals who appear outwardly well.

(2) For the people with illnesses who are concerned with medical care there are medical and paramedical talents here in Hawaii very capable of taking care of nearly every illness. There are also physical facilities that are modern and equipped to provide the best of diagnostic aids and therapy. There are federal, state, and voluntary agencies to help the public with medical problems. There are educational and research institutions gathering and disseminating valuable scientific medical data.

(3) For those who are physically well there are hazards of everyday living—accidents, narcotics, poisons, emotional, etc. No human is indestructible.

Almost immediately, the high cost of such an undertaking became apparent. Since the Medical Society is not tax exempt, an eleemosynary corporation was organized with the approval of the Board of Governors of Honolulu County Medical Society. A petition for incorporating the Hawaii Health Fair was filed by Doctors Paul Y. Tamura, Herbert Y. H. Chinn, and K. S. Tom in November, 1967. The officers and directors were named from the Health Fair Committee and included the past president, president, and president-elect of Honolulu County Medical Society:

OFFICE HELD	NAME
<i>President & Director</i>	Paul Y. Tamura, M.D.
<i>Vice President & Director</i>	O. D. Pinkerton, M.D.
<i>Secretary & Director</i>	Don E. Poulson, M.D.
<i>Treasurer & Director</i>	William S. Ito, M.D.
<i>Director</i>	Robert C. H. Chung, M.D.
<i>Director</i>	Casimer Jasinski, M.D.
<i>Director</i>	Herbert Y. H. Chinn, M.D.
<i>Director</i>	John R. Stephenson, M.D.
<i>Director</i>	Wilbur S. Lummis, Jr., M.D.
<i>Director</i>	K. S. Tom, M.D.
<i>Director</i>	George H. Mills, M.D.
<i>Director</i>	Orval D. Williams
<i>Director</i>	James R. Bunker
<i>Director</i>	Charles L. Malang
<i>Director</i>	Dermot J. Ornelles, D.D.S.
<i>Director</i>	Charles F. Aquandro, M.D.

On December 13, 1967, having met all requirements, the Hawaii Health Fair received final approval as a tax-exempt organization under Section 501 (c) (3) of the Internal Revenue Code.

Mr. Jonathan R. Won was made the Executive Secretary of this organization.



EXHIBITS

I. Professional Medical Societies

Honolulu County Medical Society

INFECTION

It Happened Once . . . Could It Happen Again?
Importance of Sanitation and Cleanliness

CANCER

Lymphomas and Leukemia
Lung
Colon and Rectum
Stomach
Uterine Ovary
Breast
Chemotherapy

EMERGENCY SITUATION

Situations Requiring Professional Help—Who to Call

YOUR FAMILY PHYSICIAN

Your Weight and Fate
Human Sexuality: The Birth of a Baby—Basic Facts: Anatomy, Physiology, Conception, Growth of the Baby in the Uterus
Alcoholism
Drugs

HEART

Rheumatic Fever
Pathology of Coronary Heart Disease
Vascular Surgery
Open Heart Surgery
Phonocardiograms
Blood Flow and Blood Pressure Measurements
Vectorcardiogram
Cardiac Difibrillator
Coronary Heart Disease

LUNG

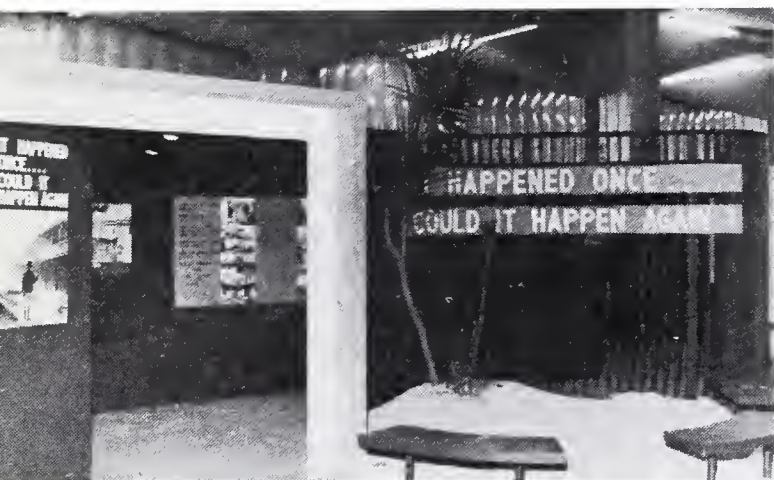
Gasping for Breath

Hawaii Medical Association

Careers Committee
School Health Committee

Specialty Societies

Honolulu Neurological Society
Exhibits X-rays
Skull X-rays
Angiograms
Ventriculograms
Hawaii Surgical Association
History of Medicine in Hawaii



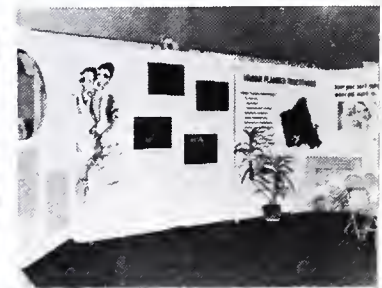
- Ob-Gyn Society
 - The Pill—Safe or Sorry
 - Prenatal Care
- Hawaii Urological Association
 - Plumber of the Medical Profession
 - How Your Bladder Can Be Examined
 - How Your Kidney Can Be Examined
- Honolulu Pediatrics Society
 - It's a Small World, After All
 - Infant Mortality
 - Birth Defects
 - Surgery in the Newborn
 - The Premature Infant
- Hawaii Society of Internal Medicine—Frank Netter
 - Presentations of Certain Condition
- Hawaii E.E.N.T. Society
 - What Does the Doctor See
 - Glaucoma
- Hawaii Medical Library
 - A Glass Case Containing Five Historical Books



II. Government

State and County

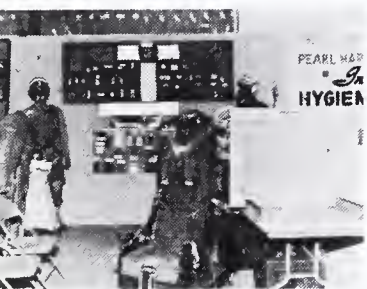
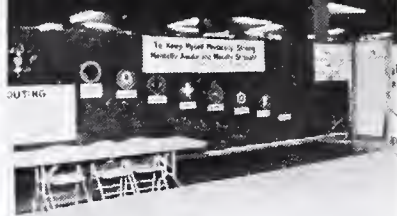
- Civilian Defense Emergency Truck
- State Department of Health
 - Health Centers
- Hawaii Planned Parenthood
 - Our Crowded World
- Honolulu Police Department
 - Traffic Safety
 - Narcotics—The Living Death
 - Wrecked Car
- Hawaii Air National Guard
- Department of Education
 - Why School Health



Federal

- United States Air Force Medical Service Exhibit and Emergency Truck
- NASA—Scale Models of Rockets with Command Module
 - Apollo Space Suit
 - Food for Space
 - Orbital Otolith Experiment
 - Space Command Module
 - Computer Photo Enhancement
 - Lunar Module
 - Medical Programs in Support of Manned Space Flights
- Pearl Harbor Shipyard—Industrial Hygiene
 - Aviation Physiology
 - Pilot's Suit
 - Ejection Seat
 - Life Raft
 - Training





Regional Medical Program of Hawaii

Progress Report:

Longer Life, Better Health Through Heart Disease, Cancer Stroke Program

U.S. Navy Submarine Base, Pearl Harbor

Decompression Chamber

Diving Suit

Tripler Army Hospital Exhibits

Everyday Emergency Medical Situations

Advances in Biomedical Research on Prostheses

Federal Aviation Administration

Aviation Medicine Today

Aviation Medical Examination

Can You Be a Pilot?

Pilot's Suit

Life Raft

U.S. Air Force—Military Airlift Command

C-9 Jet-Aeromedical Evacuation Plane

Social Security Administration

Medicare—General Information

Food and Drug Administration

Look Alikes Can Kill Your Child

U.S.N.

Dental

Mr. Disaster

III. General

University of Hawaii

Comparative Pathology of Lower Vertebrates and Man

Speech Pathology and Audiology

Department of Anatomy

Beginning of Life

Department of Pathology

Art and History in Oriental Medicine

Lung Pathology

Department of Biophysics

Electronic Probe for Cancer

Department of Food and Nutritional Sciences

Which Becomes You

Pacific Biomedical Research Center

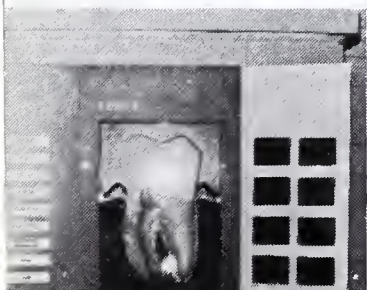
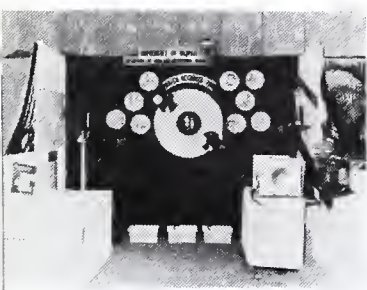
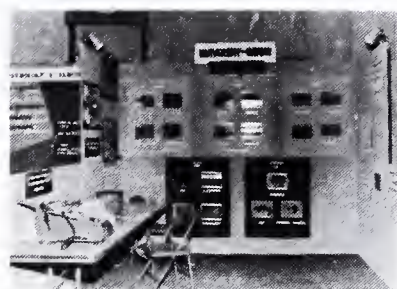
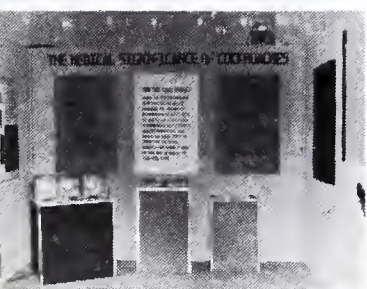
Department of Entomology

The Medical Significance of Cockroaches

Pacific Biomedical Research Center

Laboratory Animal Facility

Intrauterine Fetal Surgery



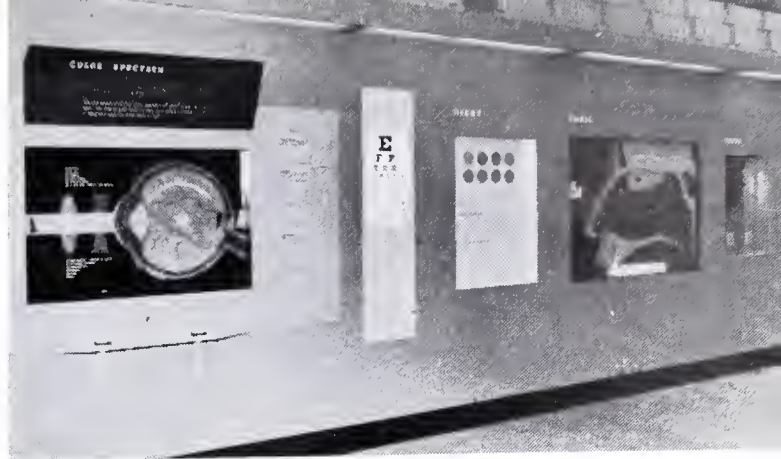
Bishop Museum

Porta-Zibits

Ceaseless Heart

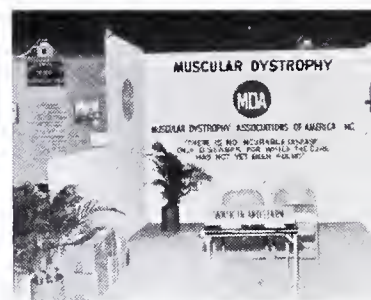
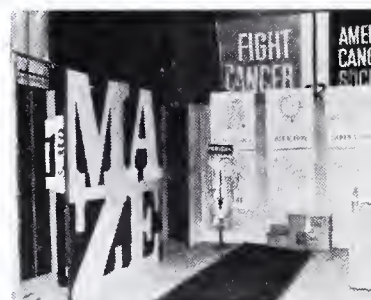
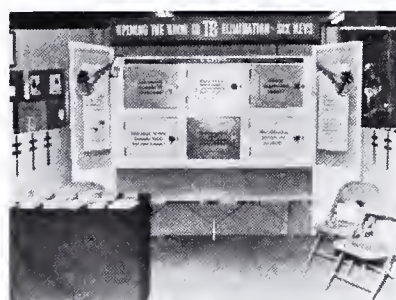
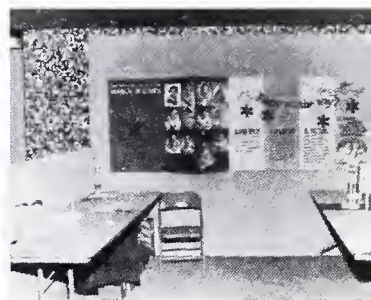
Energy Output

Taste
Smell
Sight
Hearing
Touch
Skin
Flavor
Balance—Cochlea
Valeda—The Talking Glass Lady



Health Agencies

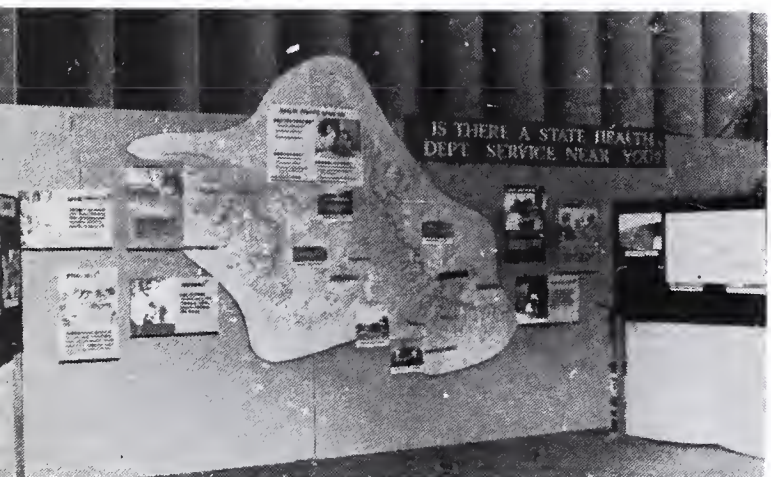
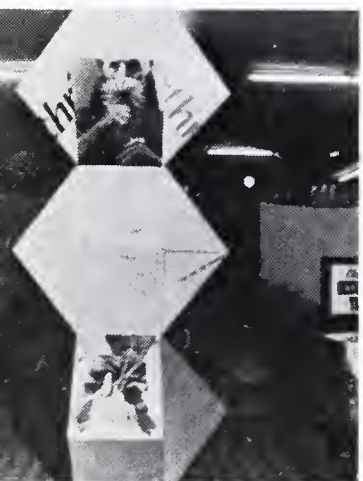
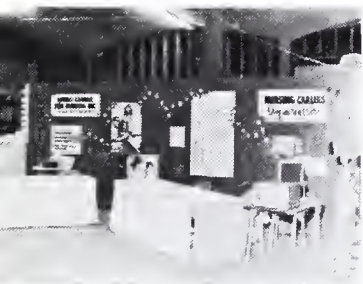
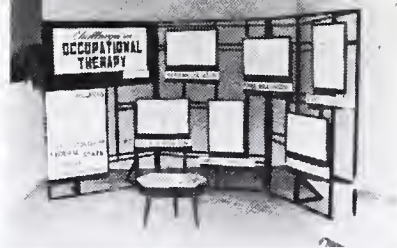
Mental Health Association—General Information
Abilities Unlimited, Inc.—General Information
Muscular Dystrophy Association of Hawaii—General Information
United Cerebral Palsy of Hawaii—Child Development Center—General Information
American Cancer Society
Lung Cancer Operation—Film
Six Most Common Sites of Cancer
Maze
Smoking
Hawaii Association to Help Retarded Children
Student Council for Exceptional Children
Arthritis Foundation—Hawaii Chapter—General Information
United Cerebral Palsy Association—General Information
The National Foundation—March of Dimes
Be Good to Your Baby Before It's Born
Aloha Council, Boy Scouts of America: To Keep Myself Physically Strong, Mentally Awake and Morally Strong
Cub Scouting
Boy Scouting
Exploring
Health and Community Services Council of Hawaii—General Information
Booth with List of Member Agencies
National Multiple Sclerosis Society—General Information
Hawaii Heart Association
Cardiopulmonary Resuscitation
Leading Causes of Death
Hawaii Tuberculosis & Respiratory Disease Association
Six Keys to Control of Tuberculosis
National Cystic Fibrosis Research Foundation—General Information
Hematology



Paramedical

Hawaii League for Nursing
Group Tent, Air Compressor
Isolette
Circo-electric Bed
Nursing Careers—Information Center





Disaster Hospital

Triage Area

Ward

X-ray

Pharmacy

Laboratory

Operating Room

Supply and Sterilizing Section

Portable Generator and Water Tank

Casualties—Community Theater Guild, Volunteers

Moulage Team—Tripler Army Hospital

Kuakini Medical Research Institute and Kuakini Hospital

Occupational Therapy Association

Challenges in Occupational Therapy

Health and Hospital Planning Council of Honolulu

Health Care System on Oahu

Woman's Auxiliary of the HMA

American Association of Orthodontists

Malocclusion

Honolulu County Dental Society

Hawaii Dental Hygienists' Association

Dental Problems

Transplant—Implant Research

Dentistry Means Comfort

Appearance and Oral Rehabilitation

Preventive Measures

Veterinarians

Speaking of Animal

Zoonoses—Diseases Transmitted from Animals to Man

Queen's Medical Center

Coronary Care Training

Chemotherapy

Auxiliary

Hawaii State Hospital—General Information

American Physical Therapy Association—General Information

Hawaii Society of Medical Technologists—General Information

St. Francis Hospital

Hemodialysis

Blood Bank of Hawaii

Compound Blood Therapy

Straub Medical Research Institute

The Diagnostic Center

Hospital Association of Hawaii

Children's Hospital and Rehabilitation Center

Prosthetic Training

Total Child

Kapiolani Hospital

Rh Disease Treatment

Hawaii Pharmaceutical Association—General Information

Hawaii Dietetic Association

Dietetics Unlimited

Careers Information

Miscellaneous

Health Insurance Council—General Information

South Seas Aquatic Diving School—General Information

IV. Screening Tests

Heartometer

YMCA, Nuuanu Branch
Y's Way to Test Your Heart

Pulmonary Function

Hawaii Tuberculosis and Respiratory Disease Association

Diabetes

Honolulu County Medical Society and Hawaii Society of Medical Technologist

Glaucoma

Hawaii E.E.N.T. Society

Oral Cancer

Honolulu County Dental Society and American Cancer Society

Electrocardiography

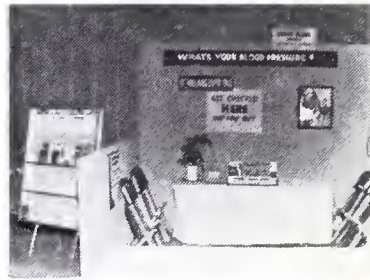
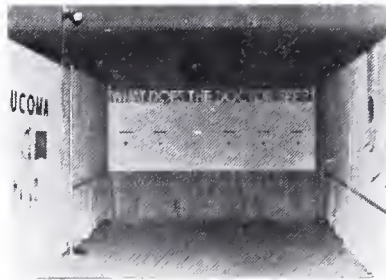
Hawaii Heart Association

Height, Weight and Blood Pressure

State Department of Health—Chronic Disease Branch

Pure Tone Screening

Hawaii E.E.N.T. Society



V. Assembly Hall

Films

Human and Animal Beginning, Sex Education

A Quarter Million Teenagers, Venereal Disease

Human Heredity, Sex Education

Drugs and the Nervous System, Drug Abuse

Narcotics—The Inside Story, Drug Abuse

Seduction of the Innocent, Drug Abuse

LSD—Insight of Innocent, Drug Abuse

None For the Road, Alcohol

Thinking About Drinking, Alcohol

The Magic Touch, Immunization

Stop Danger, Child Safety

Family Teamwork and You, Mental Health

In a Medical Laboratory, Careers in Medical Technology

Your Breath Can Save A Life, Mouth-to-Mouth Resuscitation

Coral Kings of Midway, Diving

Only Kid on the Block, Birth Defects

Barney Butt, Smoking and Heart Disease

Better Odds for A Longer Life, Heart Attacks

Three Faces of Stanley, Proctoscopic Exam

Breaking the Habit, Smoking

From One Cell, Human Development

Traitor Within, Story of Cancer

Problems in Space Flight, William Dana—NASA X-19 pilot

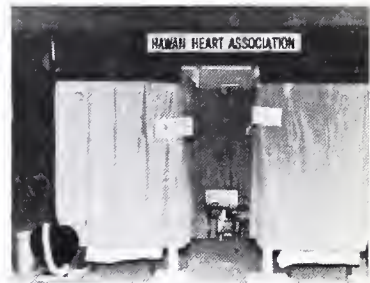
Television

Sex Education

Drug Abuse

Hawaii Medical Association — "Medically Speaking . . ." (panel discussion by knowledgeable physicians and laymen)

Actual television studio (KHET) surroundings were used and presentation was taped for subsequent use.



Screening Tests—Findings:

HEARTOMETER

The response of the heart and lung to exercise was tested on 309 people, many of whom waited as long as three hours to be tested. Two-thirds were over 60 years of age. The "oldsters" generally scored better. One man, 78-years old, scored 95%, a score expected of a trained athlete. Over 50% of the younger group (35 to 45 years) scored lower than average. Perhaps, it's time to get the younger people out of chairs and cars.

PULMONARY FUNCTION

Of the 714 people tested, 49, or about 7%, were referred to their physicians for further evaluation.

DIABETES

There were 2,240 screened. Abnormalities were found in 508 by using dextrostix, a rough screening method. Slightly less than one third of these cases (160) showed abnormal values after chemical analysis on the blood. Autoanalyses were performed at the Fair. According to Chronic Disease Branch of the Health Department, 24 have been subsequently classed as "new diabetics."

GLAUCOMA

There were 1,859 people above the age of 35 who were tested. Of these, 30 showed abnormal eye tension. At the time these data were submitted, two showed definite glaucoma and one was borderline.

ORAL CANCER

The dentists worked feverishly in shifts to examine 3,200 people. There were 186 abnormalities noted. There were 28 who showed slight to moderate suspicious changes. It is to be noted that the majority of the slightly suspicious changes are either premalignant or early malignancy, while 95% of the moderately suspicious changes are cancer.

EKG

There were 653 electrocardiographic examinations done, and 122 people were referred to their physicians for follow-up.

HEIGHT, WEIGHT, AND BLOOD PRESSURE

Slightly over 10% (180) out of 1,709 examined showed abnormalities in these parameters of measurement. It is well known that life insurance companies look with disfavor upon overweight or hypertensive individuals.

PURE-TONE SCREENING

There were 1,500 people examined. Of interest is the high frequency hearing loss in 75% of the people tested. Perhaps this reflects Mother Nature's compassionate way of helping her people to adjust to a very noisy environment.

ACKNOWLEDGMENTS

It is only through the cooperative effort of many people that a project of this magnitude can be realized. The list, while long, is anything but complete. We wish to apologize to those whose names elude us at the time of the preparation of this report.

We are grateful to Governor John A. Burns for his special interest and support of the Health Fair. The 1968 Legislature appropriated \$50,000 for the Health Fair, and we wish to give special thanks to Senate President John J. Hulten for his efforts and to the support of Senators Vincent H. Yano and Donald D. H. Ching, Speaker of the House Tadao Beppu, Representatives Hiram K. Kamaka and Pedro de la Cruz.

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Buddy Soares
Yoshito Takamine
Mitsuo M. Uechi
Mamoru Yamasaki

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Mamoru Yamasaki

ACKNOWLEDGMENTS *(Continued)*

We are grateful to our Congressional representatives in Washington: Senator Daniel Inouye, Senator Hiram Fong, Representative Patsy Mink, and Representative Spark Matsunaga for their interest and support. We wish to give our special thanks to Senator Daniel Inouye for giving his personal attention to our many requests for help in obtaining the participation of the different Federal Agencies, including NASA, Army, Navy, Air Force, and others.

Special acknowledgment is due the Chamber of Commerce of Hawaii, Chairman Eugene A. Helbush, and members of Chamber's Public Health Committee. The Chamber donated \$8,000 initially and an additional \$25,000 later when the need for expansion of our original plans were presented to them.

CHAMBER OF COMMERCE OF HAWAII—Ralph Yamaguchi, *President*

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Burkett, Ollie
Cactian, Antone C., Sr.
Carsten, William J.
Felton, George, Dr.
Hasegawa, Masato, M.D., *Vice Chairman*
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Knobel, Charles L.
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Lytle, Hugh W.
Mason, Carl, M.D.
McCaslin, Lee

Morris, Richard W.
Pack, William Y.
Phillips, Lyle G., M.D.
Pinkerton, F. J., M.D.
Prior, Douglas E.
Scott, Bud
Short, Robert A.
Silver, Maurice L., M.D.
Sunn, Franklin Y. K.
Tunks, Omar A.
Vail, Robert S.
Van Osdol, Jack
Weintraub, Sanford
Wolfe, C. J.
Geib, Russell J., Staff

We were extremely fortunate in having the following people on The Steering Committee. They had to be imaginative and optimistic when we started because we started with very little. They had to be mature and sound in their judgment to help formulate policies and render decisions, the implications of which were at times complicated. They had to be enthusiastic to stimulate the workers around them. They had to be unselfish and dedicated to work themselves as hard as they did. For almost six months prior to the Fair, there were weekly meetings which increased in duration and numbers as we approached the deadline.

John R. Stephenson, M.D.
Don E. Poulson, M.D.
O. D. Pinkerton, M.D.
Wilbur S. Lummis, Jr., M.D.
James Bunker
Keith F. O. Kuhlman, M.D.

William S. Ito, M.D.
Robert C. H. Chung, M.D.
Samuel T. Sakamaki, D.D.S.
Charles Malang
Orville Williams

Mr. Jon R. Won, as the Executive Secretary, had the mammoth task of serving as liaison between the Steering Committee, the participants, and organizations involved, including the Honolulu County Medical Society.

ACKNOWLEDGMENTS *(Continued)*

There were "dark moments" for us in the two weeks before the Fair opened when the TV and news media were saturated by intensified political campaigning. At a very late date our problem was placed on the doorstep of Mr. Cec Heftel. Like someone coming down to us from Above, he offered the total involvement of radio-television station KGMB with such well-known personalities as Checkers and Pogo, Aku, Limu, and Bob Sevey, to name a few. It doesn't mean that no one else did anything. Quite the contrary. Many in the news media came to our aid. To them, too, our sincerest thanks.

To Irving Weled, our admiration for his efficiency and knowledge, which probably "saved the show."

To Dr. Harry L. Arnold, Jr., the editor of HAWAII MEDICAL JOURNAL, our aloha for the editorial support and encouragement when we needed them most. To the doctors and medical organizations which responded with generous contributions of time and money, and, just as important, moral support.

To the participants, our appreciation for joining us in this endeavor to bring the message of health to the people of Hawaii.

Rev. Abraham Akaka
Mr. Shigeru Hotoke
Miss Margaret Fujita
Madrigal Singers
Kuhio Lions
Hospital Administrators
Miss Dagmar Stiple
Mr. Lee Wheeler
Miss Elaine Chang
Woman's Auxiliary, HCMS
Mrs. Eva Patrie
Mrs. Frank Pervorse
Mr. Calvin Ninomiya
McKinley Key Club
Mrs. Sadoyama
Rear Adm. W. L. Small, U.S.N.
Mr. Schnider
Mr. Edward Orzechowski
Mr. Stanley A. Miller
Maj. Hardin
Mrs. Peggy McEwen
Samuel Sakamaki, D.D.S.
Sgt. Major John K. Perrin
Mrs. Barbara Wheeler
Windward Theatre Guild
Mr. Charles Knobel
Mr. Milton DeMello
Boy Scouts Troop #33
Ian Hampton, Ph.D.
S. Gene Ritter, Ph.D.
Richard K. B. Ho, M.D.

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Robert C. Lee, Jr., M.D.
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Henry N. Yokoyama, M.D.
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Maj. Gen. C. L. Milburn, M.C.

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R. Wiener, M.D.
Abraham Kagan, M.D.
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Winfred Y. Lee, M.D.
Drake W. Will, M.D.
Ann B. Catts, M.D.
Glenn M. Kokame, M.D.
Coolidge S. Wakai, M.D.
Frederick A. Dodge, M.D.
Patrick J. Walsh, M.D.
Roscoe S. Pebley, M.D.
Ed. L. Chesney, M.D.
Mitsuo Yokoyama, M.D.

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and Volunteers
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Dental Hygienists
Hawaii Association of Medical Assistants
Military personnel from Kaneohe Marine
Corps Air Station

Moulage Team—Tripler Army Hospital
Tripler Army Hospital
U.S. Navy—Pearl Harbor Medical Units
Honolulu County Dental Society
Candy Strippers, Castle Memorial Hospital

Contributors

STATE OF HAWAII—Department of Health
CHAMBER OF COMMERCE
McINERNEY FOUNDATION
BANK OF HAWAII
C. BREWER & COMPANY
KALE'S HAWAIIAN SERVICES
SAMUEL & MARY CASTLE FOUNDATION
J. M. ATHERTON TRUST
HEALTH INSURANCE COUNCIL

HONOLULU GAS COMPANY
ORTHO PHARMACEUTICAL COMPANY
UPJOHN COMPANY
CHEMICAL BANK OF NEW YORK
AMERICAN CANCER SOCIETY, Hawaii Division
HAWAII ACADEMY OF GENERAL PRACTICE
HONOLULU COUNTY MEDICAL SOCIETY
DOCTORS' LIBRARY FUND OF WAHIAWA
GENERAL HOSPITAL

Abundo, Manuel A., Jr.
Akina, Charman J.
Allison, Samuel
Altman, R. L.
Aquadro, Charles F.
Arnold, H. L., Jr.
Arnold, H. L., Sr.
Arthur, Philip S.
Austin, E. R.

Balfour, John F.
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Barnes, C. W.
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Baysa, Noberto
Beck, L. C.
Beddow, Ralph M.
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Bell, Robert C.
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Bergmanis, Juris
Boyar, Jerome, Ph.D.
Berk, M. E.
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Brainard, Scott C.
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Carty, Fugate
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Chang, Gordon Y. H.
Chang, Richard K. C.
Chee, Percival H. Y.
Cherry, James W.
Chock, Clifford K. W.
Chock, K. C.
Chinn, Herbert Y. H.
Chinn, Kenneth
Chu, Francis K.
Chun, H. H.
Chun, Richard K.
Chung, Robert C. H.
Cooper, John W.
Creveling, R. L.

Dang, William W. L.
DeHarne, Maurice A.
Dodge, Frederick A.
Doolittle, S. E.
Druecker, C. T.
Dusendschon, R. C.

Eith, David T.
Emura, Edward T.
Ewing, George M.

Fernandez, Leabert
Flowers, Robert S.
Freeman, G. C.
Frissell, Thomas P.
Fujii, Takeo

Garis, G. B.
Gay, A. M.
Gilbert, F. I., Jr.
Giles, F. L.
Goebert, H. Wm., Jr.
Goldstein, Norman
Goto, George
Goto, Unoji
Gramlich, Edwin P.
Grining, D. R.
Gulledge, Wm. H.

Hale, Ralph W.
Hartwell, A. S.
Hase, Michael F.
Hay-Roe, Victor
Hindle, William H.
Ho, Reginald C. S.
Horio, Richard S.
Hunter, R. G.

Inouye, Kiyoshi
Ito, William S.

Jobe, V. R.
Johnson, Carl E. Jr.
Johnson, E. C.
Johnston, R. G.
Jones, Donald A.
Joseph, R. Bruce

Kaku, T. Roy
Kam, Calvin C. M.
Kim, Robert
Kimata, George
Kimata, Harold T.
Kistner, Robert L.
Kobashigawa, Stanley E.
Kokame, Glenn M.
Kong, Albert Y. T., Jr.
Krieger, John A.

Lafferty, F. J.
Langeberg, C. L.
Larm, Peter
Larsen, Ivar J.
Lau, Edward K.
Lau, Thomas K. L.
Lawson, Harold G.
Lee, Philip J. W.
Lee, Richard K. C.
Lee, Winfred Y.
Levin, M. H.
Li, Gail G. L.

Liljestrand, P. Howard
Lowrey, John J.
Lucas, J. T.
Lum, C. M.

Ma, Gabriel W. C.
Maffei, R. J.
Mamiya, Richard T.
McCarthy, L. J.
McCorriston, C. C.
Mertz, Audrey W.
Mertz, James L.
Millard, Robert D.
Miller, Rodman B.
Mills, George H.
Milnor, John C.
Mitsuda, Masato
Miyasaki, Seeichi
Moore, Richard D.
Moore, Ronald D.
Moore, W. F., Jr.
Morris, A. D.
Morris, John F.
Molyneux, A. W.
Myers, W. A.

Nagao, G. I.
Nakagawa, Bunzo
Nam, Herbert M.
Nance, F. D.
Natoli, W. J.
Neilson, A. W., Jr.
Nemecheck, R. W.
Newbill, D. C., Jr.
Nishihara, Mitsuo
Nishimoto, Joseph T.
Noda, Richard Y.
Nordyke, Robert A.

Ogata, R. I.
Ohta, Wilfred T.
Oishi, Robert H.
Okiihiro, Michael M.
Omura, Richard S.
Oren, Joseph
Oshiro, Hideo
Oshiro, Thomas K.

Pang, David L.
Pang, Herbert G.
Pang, H. Q.
Pang, L. Q.
Pang, Richard K. S.
Peyton, J. H.
Pinkerton, O. D.
Poulson, Don E.

Realica, B. E.
Rigler, R. G.
Roberts, John C.

Sakai, Clarence S.
Salcedo, Arturo F.
Santos, Ernesto M.
Scaff, J. H. Jr.,
Scully, Niall M.
Sexton, Harold M.
Shirai, Reynold S.
Shklov, Nathan
Siemens, A. W.
Simmons, E. Lee
Sloan, Norman R.
Smith, J. S.
Smith, R. L.
Soo, Betty S. M.
Sprague, Arthur Y.
Stephenson, John R.
Steward, J. H.
Strode, Walter S.
Sugihara, Clarence Y.
Sugiki, Shigemi
Sumida, Perry T.

Takenaka, Harry K.
Takemori, John
Takushi, G. M.
Tamura, Paul Y.
Tanaka, Kazushi
Tenby, S. H.
Teruya, Kazuo
Teruya, T. H.
Tien, David
Tilden, I. L.
Tom, K. S.
Tucker, J. L.

Waite, Verne C.
Wakai, Coolidge S.
Walsh, Patrick J.
Walsh, William M.
Wang, Richard K. C.
Watson, J. R.
Watt, Philip H. F.
Wee, Timothy I.
West, Rodney T.
Whang, Daniel
Wilkinson, W. H.
Williams, R. M.
Won, William W. T.
Wong, Arthur K.
Wong, Livingston M. F.
Wong, Rose K. L.
Wong, Sau Ki
Wong, Wayne W.
Wyatt, C. S., Jr.

Yim, Henry H. L.
You, Richard W.

Conclusions:

The second Hawaii Health Fair held on October 11, 12, 13, 1968, was the product of countless hours of work by many people for over a year cost about \$110,000. It is important now to reflect on a number of things: (1) Was it a success? and (2) Should there be another Health Fair?

The purpose of the Fair was public health education. Success depends upon whether or not the health messages were conveyed to the public. Thus, we take into consideration (a) attendance and (b) the comments made by those who attended the Fair and those who participated in the Fair.

Approximately 100,000 people attended the Fair. This is a sizable number of people. However, there are good reasons why numbers alone is not a good criterion of success. For one thing, with seven or eight thousand people at one time, the center is "crowded." Crowding makes it difficult for the public to absorb the material being presented. A good fair should be judged on the quality of the exhibits and the effectiveness of the presentation. With poor exhibits, the fair is a failure regardless of the number that attend.

The comments regarding the Fair are valuable. We were especially interested in the comments of John Q. Public and the exhibitors. The comments from all quarters were very favorable. The people who came were impressed by the over-all quality and excellence of the exhibits. The exhibitors likewise were pleased with the opportunity for exposure which enabled them to reach a large audience in a short space of time. "The people not only looked but asked questions," said several participants.

It has been suggested that the same amount of time and money spent on radio or TV is more effective than the Fair. We do not agree. The Fair, on the one hand, and radio or TV on the other, are not comparable. The former is, in fact, far more effective than any other single media because of actual public participation. The concept of awareness and early detection, so important in public medical education, is very effectively demonstrated by the abnormalities uncovered at the detection booths. Increased eye tension (which may lead to blindness), heart changes, early diabetes or cancer—can one place a monetary value on these discoveries?

The consensus appears to be that there should be another Fair. At a meeting of the Board of Directors on February 13, 1969, it was decided that there should be another Fair in 1972.

Unresolved at the time of this writing is the question of whether or not the Hawaii Health Fair should continue as an entity separate from the Medical Society. The latter has officially indicated that it (Hawaii Health Fair, Inc.) should not be separate, and has taken steps to bring about a change. The officers of the Medical Society and its Board of Governors feel that this is necessary for the success of the next Fair which will be bigger and must, at the same time, be better.

Hawaii Health Fair

BALANCE SHEET—DECEMBER 31, 1968

Assets

GENERAL FUND

Cash	\$ 282
Accounts receivable	32,873
	<u>33,155</u>

PLANT FUND

Exhibits	13,934
Allowance for depreciation (deduction)	(2,787)
	<u>11,147</u>
	<u>\$44,302</u>

Liabilities and Fund Balances

GENERAL FUND

Liabilities:		
Trade accounts payable	\$28,592	
Loan payable—Note C	5,000	\$33,592
General fund balance—(Deficit)		(437)
		<u>33,155</u>

PLANT FUND

Plant fund balance	11,147
	<u>11,147</u>
	<u>\$44,302</u>

STATEMENT OF CHANGES IN FUND BALANCES — Year ended December 31, 1968

	General Fund Balance	Plant Fund Balance
Increases (decreases):		
Net income	\$ 10,710	\$
Depreciation not funded—Note A	2,787	(2,787)
Property purchases	(13,934)	13,934
	(437)	11,147
Balance at January 1, 1968	—0—	—0—
BALANCES AT DECEMBER 31, 1968	<u>\$ (437)</u>	<u>\$ 11,147</u>

STATEMENT OF GENERAL FUND OPERATIONS — Year ended December 31, 1968

Revenues		
Contributions	\$104,347	
Booth rental	7,950	\$112,297
Operating expenses		
Health fair	96,741	
Administrative and general—Note B	2,059	
	<u>98,800</u>	
Provision for depreciation—Note A	2,787	101,587
NET INCOME—Note D		<u>\$ 10,710</u>

NOTES TO FINANCIAL STATEMENTS — December 31, 1968

NOTE A — DEPRECIATION

The exhibits are carried on the basis of historical cost. Depreciation is determined at an annual rate of 20% on a straight-line method.

NOTE B — ADMINISTRATIVE AND GENERAL EXPENSES

Administrative and general expenses do not include any payroll costs since all services rendered to the Hawaii Health Fair are on a voluntary basis.

NOTE C — LOAN PAYABLE

The Honolulu County Medical Society loan of \$5,000 was repaid in January 1969. In addition, the Honolulu County Medical Society transferred another \$5,500 to the Hawaii Health Fair in January 1969. No written documentation for this advance was prepared.

NOTE D — FEDERAL AND STATE TAXES

No provision for liability has been made for federal and state income taxes as the Hawaii Health Fair is a non-profit organization and has obtained an exemption from federal income taxes under Section 501(c) (3) of the Internal Revenue Code of 1954.

ERNST & ERNST

915 FORT STREET

HONOLULU, HAWAII 96813

Board of Directors
Hawaii Health Fair
Honolulu, Hawaii

We have examined the balance sheet of Hawaii Health Fair, a Hawaii corporation as of December 31, 1968, and the related statements of changes in fund balances and general fund operations for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of changes in fund balances and general fund operations present fairly the financial position of Hawaii Health Fair at December 31, 1968, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles.

/s/ ERNST & ERNST

Honolulu, Hawaii
May 28, 1969



The President's Page



In recent months there has been an intense effort to develop local "peer review" programs. There are numerous reasons for this stepped-up program, not the least of which is responsibility to our patients to refute the unfounded "vilification of the physician," attacked recently by Dr. Gerald D. Dorman, president of the American Medical Association.

In July, 1969, the AMA House of Delegates adopted a report from which I quote the following:

"No greater challenge faces the profession today than to secure universal acceptance and application of the review concept as the most meaningful method of creating a public awareness of medicine's effort to assure high quality of health services at reasonable cost. . . ."

The concept of "peer review," as it exists today, involves three basic and well-defined mechanisms: the physician audit system (PAS), hospital utilization review, and review of selected claims for inpatient and ambulatory medical care.

All three of these systems are working in Hawaii, fairly well integrated but with varying levels of effectiveness and productivity. These mechanisms were developed and instituted by physicians. They must be serviced, improved, and maintained by practicing physicians.

These activities which determine and measure, and may alter, the availability, quality, and cost of medical care cannot be made the sole responsibility of data processing programmers or lay clerks in hospitals and insurance companies.

In order for the practicing physician to carry out successfully this responsibility of "peer review," it is incumbent on government, unions, management, insurance companies, and other purveyors of health care programs to seek expertise from the local medical society when anticipating a health care package that the physician is expected to review. This serious omission is made frequently. Medicaid is a striking example.

Please respond willingly when called on to serve as a reviewer! Make the time! It is already almost too late. Accept the challenge and carry out your responsibility with objectivity and the highest level of professionalism.

Dr. John M. Kenney, president of the United Foundations for Medical Care, pioneers in "peer review," clearly identifies the issue:

"Peer review can only be performed by highly qualified people who not only have the capabilities of understanding and performing the function but, of equal importance, who enjoy the professional respect and confidence of those whom they serve."

The time to kokua is now!

George H. Mills M.D.

The Morality of Organ Donation

A recent visitor to Hawaii, Dr. David Daube, Regius Professor of Civil Law at Oxford University, had some interesting remarks to offer on the subject of organ transplantation. As a member of an ad hoc commission appointed by the British Ministry of Health to consider legislation on the subject, he is extremely well informed on it.

Three sources of organ grafts, he said, are out of bounds for moral reasons and should be made illegal as well: children under 18 (he thought 21 an unnecessarily advanced age limit), prisoners, and inmates of mental hospitals. These should be excluded, he said, because they are unable, by reason of either immaturity, circumstances, or inherent mental defect, from exercising mature, informed consent to the procedure.

Cadavers, he believes, should be freely available for this purpose, without interposition of any formalities or other barriers, except for three: their use should be strictly forbidden if (1) it is known or may be presumed that it would be against the wishes of the deceased person; (2) it is objected to by the spouse or by parents; or (3) foul play is suspected or known to have occurred.

The use of cadavers for the benefit of the living is not without historical precedent: Petronius, the famous old Roman Arbiter of Fashion, tells the story of a lovely lady, bereft of her husband, who was mourning in the tomb in which he had been laid to rest, when a soldier, who had been stationed not far away to guard the corpse of a hanged criminal, left his post at the gibbet and sought the relative warmth of the mausoleum. His initial surprise, and hers, led shortly to their becoming, shall we say, much better acquainted. But he was horrified to find, on returning to his post, that the act he had been stationed there to prevent had taken place during his absence: the corpse had been taken away by relatives, and he was facing certain court martial and probable execution. The lady shared his distress, and

promptly conceived the ingenious idea of substituting her husband, who was beyond minding it, for the body of the hanged criminal; and thus did a cadaver actually save the life of a man who was otherwise doomed to die!

Dr. Daube's thoughts on experimental procedures in medical practice were quite clear: he suggests that reasonable new approaches aimed primarily at cure or at least relief of disease are generally permissible if they carry no material risk of serious injury or death—but not otherwise. Much more leeway may be permitted, however, as is explicitly stated in the Nuremberg Code, if the doctors concerned participate in the same experimental procedure, whatever it is.

Medical experimentation is only one aspect of the broad problem of what may or may not properly be done in the use of humans for purposes of study, Dr. Daube said: educators, psychologists, and others are involved in this question quite as much as physicians are, and they run just as much risk of doing harm as physicians do. Psychological experiments, and educational experiments, need to be studied with some care from the standpoint of possible harm to the subjects or participants, just as medical experiments do.

Dr. Daube is strongly opposed to the adoption of legislation to define legal death; he thinks such an effort is premature, and likely to result in more harm than good. He particularly fears that it might create a climate of anxiety that would lead to such general fear of being allowed to die just to make available another heart, that people might generally tend to protect themselves by announcing that their organs were not available for this purpose under any circumstances. We should, he thought, merely trust an enlightened medical profession to make the determination of death in the usual way—even though such a requirement might, almost as a rule, make the obtaining of hearts for transplantation extremely difficult and often impossible.

Multidisciplinary Clinic for Myelodysplasia

Through the efforts of the Birth Defects Center at Kapiolani Children's Hospital, Crippled Children's Bureau, and Shriner's Hospital, a multidisciplinary team care clinic for children with meningomyelocele and related myelodysplastic lesions has been established in the Children's Hospital Outpatient Department. October 16 was the starting date for this program of comprehensive long-term care for these children, who too often are viewed as hopeless and with little or no chance for a productive or useful life.

The primary goal of the program is to direct the services of specialized personnel in multiple areas to the child with meningomyelocele, depending on his or her individual needs, as soon after birth as possible, for the purpose of salvaging and preserving neuromotor function. This is followed

by an integrated medical and surgical program for the maintenance of health, mental and physical development within the capabilities of each child and his or her family constellation.

The Birth Defects Center staff will serve as coordinator for this program, and referrals should be directed to their office (Kapiolani Children's Hospital). Participation by the family physician at team conferences will be encouraged, and medical or surgical problems not related to this primary birth defect will remain within his jurisdiction.

Spina bifida and related birth defects that produce neuromuscular and genitourinary impairment require a comprehensive long-term habilitation program to salvage and develop the individual child's maximum physical, mental, and psychological potentials.

Trophoblastic Disease Center

A Trophoblastic Disease Center has been established at Kapiolani (K'pe-o-lani, please, NOT "Copy-o-lani"!) Maternity and Gynecological Hospital in conjunction with the University of Hawaii School of Medicine.

The founding committee consists of Dr. Clare Sprague, pathologist; Dr. Colin C. McCorriston, chairman of the hospital's tumor board; Dr. Robert W. Noyes, professor of obstetrics and gynecology; and Dr. Frederick C. Greenwood, professor of biochemistry.

The purpose of the center is first to make available, through concentration of referred patients,

clinical and laboratory experience with hydatidiform moles and choriocarcinoma; and second, to study and hopefully to improve upon various chemotherapeutic methods used in the management of these disorders.

Private patients may be referred by their physicians at no expense for clinical opinions and suggestions regarding therapy. It is hoped that patients will be referred from all islands.

To make appointments, please call 949-4111 and speak to Mrs. Lucilli Imahiro, secretary to the tumor board. A brief written medical summary should accompany the patient. ■

Fountain of Youth

Recent studies in a mental institution showed that castrated men live longer. The younger the age of castration, the greater the increase in life span. It is not anticipated that this gem of medical research will start a stampede of eager males demanding immediate emasculation, but extrapolation of this finding into the psychosocial sphere might be interesting.

In the typical American marriage, statistics show that the wife usually outlives her husband by several years. However, personal observation suggests that wives of the aggressive masculine type often predecease their relatively effeminate spouses. Perhaps that favorite character of the contemporary novelist, the psychologically castrating American female, is subconsciously trying to protect herself from lonely widowhood by insuring that she dies before her henpecked husband.

Sins of the Fathers

For centuries, Spain tolerated many races and religions. Christians, Moslems, and Sephardic Jews lived harmoniously together within its borders. With the ousting of the Moors and the coming of the Inquisition, intense pressures were brought upon the Jews to convert to Christianity. Many were tortured and killed. Some fled to other lands, while a few embraced Catholicism and were assimilated into the general population. Decades later, when the Spanish Armada sailed against England, their galleons carried amongst their crew many of the offspring of these unwilling converts to Christianity. As every schoolboy knows, the great armada was defeated by Sir Francis Drake in a sea battle off Plymouth Hoe and fled in disarray. Remnants of this shattered fleet were wrecked on the coast of Ireland, the survivors settling there and intermarrying with the local populace. Descendants of these unions, because of their swarthy complexion, were known as the Black Irish.

This historical vignette would have little medical interest were it not that some of the descendants of the original Sephardic Jews carried with them the trait of a fascinating disease—familial Mediterranean fever, which was subsequently passed on to their Irish offspring. This disease springs up occasionally in Ireland even to this day, presenting clinicians with the diagnostic

dilemma of recurrent attacks of fever, abdominal pain, arthralgia, and rashes occurring in otherwise apparently well persons.

To New Yorkers, the Black Irish are those grinning Harlem blacks who proudly march down Broadway in the annual St. Patrick's Day parade. In the Emerald Isle, they represent a living reminder of the terror and repression of the Spanish Inquisition and of a noble victory by an English sea captain in the Year of Our Lord 1588.

Speaking at Medical Meetings

This is the subject of a pithy paper by Dr. Roy Meadow of Guys' Hospital, London (*Lancet*, September 20, 1969). Having witnessed (and, alas, personally participated in) some of the atrocities perpetrated in the fair name of medical education, we feel that this short article should be required reading for all aspiring to gain competence in the art of communicating knowledge.

A few excerpts should serve to whet the perspective reader's appetite. Speaking of the lectern hazard, he warns: "The other lectern hazard is the one in a new lecture hall, which has been designed by an enthusiastic medical-illustration department tycoon. There will be a terrifying space ship type of control panel bearing 30 remote control switches, mostly unlabeled. Don't touch anything, or you will find yourself grappling with a berserk lecture room in which blinds rise and fall, lights flicker, fans whirl, trap-doors open, and projectors rise out of the earth." Like most of us, Dr. Meadow finds visual mannerisms very distracting. "Some visual mannerisms are very distracting. There are many varieties of the perpetual mover: the simple wriggler, the rocker, the long-distance walker, and the greyhound who strains back and forth as if in a starting box. It is best to be still, and to stand up straight behind or by the lectern. Do not crouch behind it as if taking cover from snipers, and do not lounge over it like an advertisement for self-supporting trousers. For that reason it is best to avoid putting your hands inside the waistband of your trousers."

Finally, he concludes, "it has been said that an experienced speaker is one who goes on making the same mistakes with increased confidence. A good speaker is one who asks his critics and his friends to tell him what was wrong with his presentation." ■

W. PHILIP JONES, M.D.

The **Scientific Program Committee** voted to eliminate breakfast at HMA annual meetings. Programs will start at 7:30 A.M.

The **Negotiating Committee** received reports from DSS that the Federal government is imposing limitations on the fees that can be paid, to be not more than 75% of the fees charged as of January 1, 1969, with possible increases based on Consumer Price Index. The VA authorized an increase in the conversion factor to 6.5 effective August 7, 1969—not to be increased during next contract period. The committee is asking for a conversion factor of 7.0 for the year 1971.

The **School Health Committee** approved going to the schools for mass rubella immunization in Waianae-Nanakuli.

The **National Legislation Committee** voted to recommend that the HMA support the principle of national health insurance via the medicredit approach (which recommendation has been approved by the Council) and received an appeal from SAMA to help restore loans to medical students.

A **Panel of Medical Speakers** on socioeconomic problems was formed into teams, to present to interested groups our side of current controversial discussions.

The **Automotive Safety Committee** voted to have a more active role in public relations in their field—driver licensing, alcohol and drivers, and emergency medical care, including licensing of ambulance drivers.

The **Communicable Disease and Immunization Committee** approved a revised draft of leprosy regulations.

The **Careers Committee** is working with 35 medical and paramedical groups which are co-

operating to plan a coordinated Health Careers Day for next February.

The **News Media Committee** met with Tomi Knaefler to discuss the news problems of the recent kidney transplant at St. Francis Hospital.

The **Commission on Medical Services** discussed the proposal to keep DSS fees within the 75 per cent percentile. Dr. Mills has asked HMA members to bill at usual and customary rates, but DSS still requests billing at 5.0, saying their computer can't convert.

The **Bureau of Research and Planning** invited Dr. Beverly Payne to come to Honolulu to discuss implementing Sanazaro report regarding survey on medical care quality. He will return in February to do his on-site work.

The **Workmen's Compensation Committee** voted to request reimbursement on the basis of usual and customary. Mr. Robert Hasegawa, Labor Department Director, suggests changing the Law.

The **Public Relations Committee** asked the Council for \$400 to set up a telephone complaint center to be called "Pulse Line." The proposal was referred to the component societies for study.

The **Message of the Month Committee's** perennial problem of getting messages distributed is being shelved in favor of a monthly newspaper ad.

The **TV-Radio Committee** set up fall schedule and learned that Kauai does not plan on having a Kauai program.

The **Publications Committee** voted to accept ads from labs, to follow guidelines from AMA, to identify authors of articles by noting affiliation, and decided next year to ask for funds for editorial assistance. A retired school teacher, Mr. Anderson, is now providing help without compensation. ■

JOHN BROWN, M.D.



Hawaii Academy of General Practice

... take him to the nearest hospital!

People seem not to understand how hospitals function. (Incidentally, they also have no idea what medical ethics is all about—perhaps some ancient holy writ that is meant to punish a patient so foolish as to tell his doctor off!) The general public cannot be convinced that hospitals don't practice medicine. The reasons for this lack of understanding are few and simple.

All hospitals are open 24 hours a day. Most people have perhaps a single encounter with the need for medical care in a lifetime. This is usually of an emergency nature, usually at night when doctors' offices are closed and the physicians are tired and reluctant to make house calls. It makes no great difference whether Mr. John Q. Public receives care at a large urban hospital staffed with house doctors in white, or whether it might be at a small rural facility with a doctor on call, or one to be called from the nearby community. The patient's memory afterwards is of the service rendered, usually good or adequate; the name of the professional remains of little consequence.

Physicians working out of hospitals function within an aura of high standards and quality medical care. The place is usually large, smells sanitary, and has an imposing appearance due to staff and equipment. Not so the solo practitioner's office, which, at best, is purposefully made to simulate the privacy of a home and not a public place.

Hospitals are the place where diagnostic facilities are grouped together, where there are specialized treatment available—physiotherapy, x-ray therapy, and the like. Emergency services are available. Doctors are likely to congregate here, and can probably be located off hours.

We, by our constant efforts—and apparently succeeding quite well—have created this image of the modern hospital as being “the corporate physician.” It applies more to hospitals than to large clinics or groups, perhaps because hospitals mix in- and out-patient care.

The public little knows (and is not likely to learn) that a community hospital is actually not

a “corporate physician” but an aggregate of quite independent physicians who are often *prima donnas* besides! The J.C.A.H. would have “the medical staff” mean a close-knit body acting in harmonious concert, each member a willing worker yet subordinate to the will of the whole—the locally constituted society of professionals. In actual practice, despite bylaws, rules, and regulations, it is next to impossible to weld a medical staff into such an entity.

If every physician were completely ethical, well trained, and fully capable, and attempted nothing beyond those capabilities; if the staff doctor kept up his medical records meticulously and succumbed neither to the wiles of patient pressure for overutilization, nor to the laziness that can lead to underusage, then there would not be much use for bylaws. Rules and regulations do not, of themselves, make for good practice. On the contrary, a hospital may serve its community well and still be unaccredited. We lay too much emphasis on the outward face of standardization, and spin our wheels in concern over whether the other guy is “toeing the line” or “carrying his load.” We are forgetting that each one of us on a hospital staff is, in the eye of John Q. Public, a cog in the machinery that makes a “good hospital.” We HAVE to be good, therefore.

Unfortunately, as a bunch of individualists, we are usually unconcerned about our staff image. A few have a social conscience, and work hard at staff matters; some crave the emulation of their peers; and some of us are just naturally “bossy.” We become “actives.” Most of us, however, are content with “courtesy” status—wherein we simply do our own thing.

John Q. Public may be slow to learn, but the social planners and the politicians are rapidly becoming aware of our professional weaknesses. Unless we, in hospitals, devise a better way to encourage—or even enforce—active participation in medical staff work, we may some day awaken to find ourselves enslaved by a system not of our own choosing. ■

J. I. FREDERICK REPPUN, M.D.



University of Hawaii

In the School of Nursing, the Department of Health Education & Welfare has awarded the Psychiatric Nursing Program a grant of \$31,789. On March 3-8, **Mrs. Cynthia Aiu** and **Mrs. Jacqueline Johnson**, of the Department of Technical Nursing, and **Mrs. Rosemary Rodewald**, of Professional Nursing, attended the National League for Nursing's annual meeting at Atlanta, Georgia. One of the main topics was Nursing Education for the Disadvantaged Student. In the Department of the Professional Nursing, **Joanna Fancer** and **Charlotte Tacke** attended a Continuing Education Seminar of the Western Council on Higher Education and Nursing in Phoenix, Arizona, March 19-21, 1969.

The University of Hawaii will experiment with an **interim semester**, December 24, 1969-January 25, 1970, during which students may take, without credit, a wide variety of short courses, seminars, or field work in areas not usually available to them during the regular periods of instruction. Twenty-six members of the second year class have elected to take clinical preceptorships, usually in the form of hospital clerkships, of two or three weeks' duration. Three of these will be in medicine, eight in cardiology, two in neurology, three in surgery, three in pediatrics, three in obstetrics and gynecology, and one each in dermatology, psychiatry, radiology, and emergency room. The students are most appreciative of the time given by the clinical faculty for this valuable instruction.

The **integrated psychiatry residency training program** of Hawaii has recently become the Affiliated University of Hawaii Psychiatry Residency Training Program, and is to be run jointly by Queen's Medical Center, The State Health Department, and University of Hawaii School of Medicine. **John McDermott, M.D.**, and **Walter Char, M.D.**, will be responsible for the program until a full-time director is appointed.

Calvin C. J. Sia, M.D., recently visited the new 1,000-bed Caritas Medical Centre in Hong Kong as a guest of the Medical Superintendent, Li Wai Chee, M.D. Dr. Sia reviewed procedures in the

newborn nursery and premature nursery and lectured on *Recent Advances in Premature and Newborn Care*.

The third class, of 40 students, has been admitted to the School of Medicine. Thirty-five of these are taking the regular curriculum, and five are special students (one from Hong Kong, one from American Samoa, one from Thailand, one from Hawaii, and one from the mainland) taking a slower progression. Four of the class are women, 31 are men; 33 are residents and six (of which four are special students) nonresidents.

In the Department of Anatomy, **Vincent J. DeFeo, Ph.D.**, **Milton Diamond, Ph.D.**, **Ryuzo Yanagimachi, Ph.D.**, **Y. D. Noda, Ph.D.**, **Robert W. Noyes, M.D.**, and **Charles Odom, M.D.** attended the second annual meeting of the Society for the Study of Reproduction at Davis, California, September 8-10, 1969. Doctors Yanagimachi and Noda gave a paper entitled *Behavior of Gamete Plasma Membranes in Fertilization in Hamsters*.

Four new appointments have been made in the Section of Obstetrics and Gynecology: **George Shimomura, M.D.**, Clinical Instructor, a native of Waipahu; **Wayne S. Takemoto, M.D.**, Clinical Instructor, born in Kapaa, Kauai; **Thomas H. Teruya, M.D.**, Clinical Instructor, from Honolulu; and **Eleanor Carlo Crim, M.D.**, Assistant Clinical Professor, of Seattle. Dr. Crim will be chief of Obstetrics and Gynecology at the Lyndon B. Johnson Tropical Medical Center, Pago Pago, beginning in November. The University of Hawaii Joint Residency Training Program hopes to send a resident to American Samoa in 1970.

The **Student Affairs Office** reports that unsolicited word has been received from four students in the first class to transfer to the mainland. All report their educational preparation here has placed them well ahead of their new third-year classmates in working on the wards. Coming from students at places like Harvard, Penn, and Northwestern, this really means something! The Med School sends "thanks" to those of you who helped to prepare these students in such fine style! ■

ROBERT W. NOYES, M.D.

● An 11-year-old Hawaiian-Caucasian school-boy was hospitalized because of dizziness and fatigue of two to three weeks' duration. He had no other complaints and no loss of appetite. A brother had had rheumatic fever.

● His temperature on admission was 100.7° and he was quite pale. A blowing systolic murmur was heard at the apex. Physical examination was otherwise negative. His sedimentation rate was 65 mm, hemoglobin 3.5 gm, hematocrit 12.5, RBC 1,990,000, and red cells were microcytic and hypochromic. His feces were 4+ guaiac and benzi-dine positive. His urinalysis was normal.

● At the time of the film below, from an upper gastro-intestinal and small bowel examination, a 10-12 cm firm, immobile, and slightly tender mass was found in the lower right mid-abdomen. He was taken to surgery with a surgical preoperative diagnosis of a ruptured Meckel's diverticulum.

● Answer is below.



The mass at surgery was found to be a large, ulcerated tumor of the ileum. The tumor was removed and an end-to-end anastomosis performed. Postoperative irradiation was given in view of the pathological report of primary lymphosarcoma. The patient made an uneventful postoperative recovery, tolerated the irradiation well, and when last seen, at age eighteen, was in excellent health.

Submitted by the
RADIOLOGICAL SOCIETY OF HAWAII
THOMAS C. BROWN, M.D. ■

This is the eighty-first installment of In Memoriam—Doctors of Hawaii.

Rafe Nelson Hatt

Rafe Nelson Hatt was born in West Paris, Maine, on November 11, 1889, the son of William Angus, a lumberman, and Cora (Stevens) Hatt. He received his early education at West



DR. HATT

Paris, prepared for college at Bridgton Academy in North Bridgton, Maine, and was graduated from Colby College in 1914. Following his graduation from Tufts Medical School in 1918, he served his orthopedic internship at the Massachusetts General Hospital in Boston.

Continuing at the same hospital, from 1920 to 1922 he held the posts of Assistant in Orthopedic and Assistant Surgeon to Out-Patients, at the same time carrying on an orthopedic practice in Boston.

During his years at the Massachusetts General Hospital, he made such rapid strides in orthopedic surgery that the man under whom he studied, Dr. Robert B. Osgood, strongly recommended his appointment as Surgeon-in-Charge of the Mobile Unit of a Shriners' Hospital for Crippled Children, then about to be established in Honolulu. Before accepting the post, Dr. Hatt visited the famous Scottish Rite Hospital for Crippled Children in Atlanta, Georgia, the model upon which the Shriners' hospitals were patterned, where he was further inspired by the great work of Dr. Michael Hoke. He accepted the Honolulu post and assumed charge there in December, 1922. He organized the Honolulu Unit at Children's Hospital under great difficulties. His achievements in this field were so marked that, shortly before the completion of the New England Unit of the Shriners' Hospital at Springfield, Massachusetts, he was recommended by the Shriners' National Advisory Board of Orthopedic Surgeons as the man best suited to take charge of the Springfield Unit. He reluctantly left Honolulu in November, 1924, after almost two

years in the Hawaiian Islands and, on December 24 of the same year, took charge of the nearly completed Springfield Shriners' Hospital.

In August, 1942, Nelson Hatt entered the Army Medical Corps in World War II. He went overseas immediately following the invasion of Sicily in 1943 and was a front-line surgeon during the strenuous days of the first landings on the southern front of Europe. Due to a knee injury received in line of duty, he was returned to the United States in May, 1944; there he was assigned to the Thomas England General Hospital in Atlantic City as Chief of the Orthopedic Service. Later he was stationed at the Cushing General Hospital in Framingham, Massachusetts, as Chief of Orthopedic Surgery.

He had a very difficult time making the decision to leave his work with the crippled children to serve with the Army and his assurance that he had made the right decision came in a letter sent to a friend in Springfield, written while he was with the troops in Sicily.

"I am getting a kick out of this service and I have long since ceased to wrestle with my conscience for having deserted one of the most important jobs on earth, a crippled child," he wrote. "Here I have an opportunity to send the Jones' kid or the Brown's only boy back alive or to save an arm or leg for Junior Smith. It may sound a bit strange, but the same service to Karl Heinrich or Giuseppe Biorni has been gratifying too."

After leaving the Army Medical Corps in 1946 with the rank of Lieutenant Colonel, Dr. Hatt returned to the post of Chief Surgeon of the Shriners' Hospital in Honolulu, which he had left when he accepted the position in Springfield in 1924. He continued to serve in this capacity until his death on May 27, 1949.

He was honored by his colleagues in the medical profession in Springfield with his election to the presidency of the Springfield Academy of Medicine in 1939. The following year he was appointed by Governor Leverett Saltonstall to a five-year term as member of the Massachusetts Public Health Council. He was the recipient of the Pynchon medal, awarded annually in Springfield for outstanding service to the community. In 1938 his Alma Mater, Colby College, presented him with an honorary Master of Arts degree. He was a 32nd degree Mason and was a member of

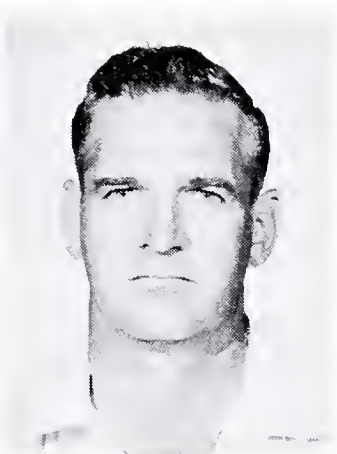
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County Society News



Jerome T. Kay, M.D.

Box 517
Honokaa, Hawaii 96743
GENERAL PRACTICE
Northwestern University—1965
Internship—The Queen's Hospital—
1965-1966



William E. Spies, M.D.

144 Haili Street
Hilo, Hawaii 96720
RADIOLOGY
University of Oregon—1947
Internship—St. Luke's Hospital,
Spokane, Washington—1947-1948
Residency—Providence Hospital,
Seattle, Washington—1953-1954
University of Oregon Medical School
and Clinic Radiology—1966-1969

Hawaii

The September 19 meeting was held at the Hilo Hotel. Mr. Ed Rice was present to solicit support for the Hawaii Island Mutual Fund. Mr. Hugh Van Wagoner urged the Society's support in the coming campaign. Dr. Loo announced that the diabetic survey will be conducted during the second and third weeks of January, 1970, and asked for \$25 to cover miscellaneous expenses. The money was appropriated. It was voted to invite Rev. Paul McCleave and Dr. Gerald Dorman to meet with the Society. The motion to endorse local fluoridation was passed with one dissenting vote. It was voted to advise the Department of Regulatory Agencies that there is a need for a general practitioner in Hilo. A GP from California has expressed interest in taking over Dr. M. H. Chang's practice. A report on the scholarship fund was made by Dr. Oto. The scientific portion of the program was provided by the Hawaii Arthritis Foundation.

One regular and two special meetings were held during October. At the regular meeting held on October 17 Dr. Gross from Greenleigh Associates reported on the study on the quality of medical care they are doing. Drs. Jerome Kay and William Spies were elected to active membership. Approval was given to the Hawaii Heart Association to conduct a photocardiogram program in the schools. The suggestion that an observation platform at the Halemaumau Crater should be placed elsewhere, since the fumes appear to be causing serious problems with certain susceptible persons, will be sent to the District Health Officer. Dr. Scott Halstead spoke on the current rubella project.

On October 18 a special meeting was held at Sun Sun Lau honoring Dr. and Mrs. Gerald Dorman, and on October 21 a dinner meeting honored the Rev. Dr. Paul J. McCleave who visited Hawaii with the chairman of the HMA's Medicine and Religion Committee. Dr. Francis H. Soon.

Honolulu

Approximately 135 people attended the September 2 meeting. The following new members were welcomed into the Society: Argyl Bacon, Lester L. Bergoron, Sigdian S. Lim, James L. Erickson, and Tatsuo Watanabe. The September 24 community disaster exercise was announced. The doctors were advised that the preliminary mailing for a Foundation-sponsored medical-surgical-hospital plan for physicians and their employees had been mailed out. Dr. Walter Alvarez was the guest speaker for the evening. He was introduced by Dr. Joseph Strode. A motion was passed which asked that the president appoint an ad hoc committee of five members to study and report back at the next meeting a procedure that would make joining the County Society, the State Association, and the AMA an optional one. ■

COUNCIL MEETING

September 28, 1969—10:00 A.M.
Mabel Smyth Conference Room, 2d Floor

PRESENT

George H. Mills, presiding; Drs. Batten, Chinn, Dang, Iaconetti, Jones, Lowrey, Sloan, and Tomita; plus Drs. Goebert, George Goto, Oren, Calvin Sia, K. S. Tom, Wakai; AMA Field Representative, Mr. Richard Layton, Mr. H. Tom Thorson, and Mrs. George H. Mills, 1st Vice President of the Woman's Auxiliary to the HMA, and Dr. Beverly C. Payne.

ORDER OF BUSINESS

It was requested by the Chairman of the Bureau of Planning and Research that the report of the Bureau, the special report by Dr. Beverly Payne, and the report on Computer Technology in Medicine be moved up on the agenda.

ACTION:

It was voted to accept the request of the Chairman of the Bureau of Planning and Research.

Report of the Bureau of Research and Planning: The report was circulated, reviewed, and briefly discussed. The Bureau had one recommendation.

ACTION:

It was voted to accept the recommendation of the Bureau of Research and Planning that the Hospital Committee be asked to pursue the problem outlined in the Sanazaro Report of establishing a uniform means of measuring the quality of medical care in the hospitals.

Special Report of the Bureau of Research and Planning regarding Dr. Beverly C. Payne: In June, a letter was addressed to Dr. Sanazaro informing him of the Council action in deciding to move on with the implementation of his study relative to determining the quality of medical care in Hawaii. He was asked to recommend the best approach to this problem and whether he felt a consultant should be brought in. Dr. Sanazaro suggested two men who would be able to assist in defining the next steps. Dr. Beverly C. Payne was selected.

Dr. Payne was introduced. He elaborated on the report that had been circulated and stated that the documented care delivered in both office and hospital settings will be compared to predetermined criteria developed by panels of physicians from the HMA. This comparison will be accomplished by a computer technology to provide speed and predictable accuracy in such measurement. Identification of conformity to these optimum standards will then be reviewed by the physicians from the HMA who will sit as an advisory group to the study director and his staff.

The Bureau of Planning and Research voted to recommend to the HMA Council that Dr. Beverly C. Payne prepare a protocol, with himself as principle investigator, for the evaluation of personal medical care within the State of Hawaii and to pursue its implementation in association with an advisory group of the HMA.

ACTION:

It was voted to accept the recommendation of the Bureau of Planning and Research.

Dr. Payne asked the Council what the HMA intends to do with such a report once it is completed. He posed this question at the Bureau meeting and no one seemed to know the answer. The results of the study need to have wide publication, perhaps in *JAMA*. He advised the Council that he will begin the study as soon as possible so that funding through grants from foundations as well as the Federal government can be accomplished in order to complete the study. To reassure the officers of HMA and the Chairman of the Bureau, the Council went on record that HMA is going to progress on the project once Dr. Payne's study has been completed.

Report on Computer Applications in Medicine: A report by Dr. Oren was circulated, and reviewed.

ACTION:

It was voted to accept the report as circulated.

MINUTES

The minutes of the July 27, 1969, meeting were circulated, reviewed, and discussed. Further discussion of the last meeting was deferred and taken up under New Business.

ACTION:

It was voted to approve the minutes as circulated.

COMMUNICATIONS NOT REQUIRING ACTION

Comments on Bulletin re AMA Statement on Trends in Long-Term Care: This bulletin was circulated to members of the Council for perusal and, if any, comments. No comments were made.

Comments on Bulletin re Report in AMA Newsletter on AMA Actions Relative to the Appointment of an Assistant Secretary for Health and Scientific Affairs in HEW: This bulletin was circulated to members of the Council for information. Mr. Layton commented on the role of the AMA briefly. No other comments were made.

Report from Maui County re Meeting with HMSA Representatives: Dr. John Morris, President of the Maui County Medical Society was asked at the last Council meeting to report on Maui County's meeting with HMSA. The following letter was received:

Mr. Albert Yuen of HMSA met with a few members of our group and discussed the feasibility of prepaid medical care plans with groups. They feel that in this way they could more effectively compete with a plan such as Kaiser. This, as you could easily imagine, did not include the individual practicing physicians.

Dr. Iaconetti pointed out that HMSA's proposal was suggested as a means of competing with the Kaiser Plan; reimbursement would be on a contractual basis. For example, they would insure the Pioneer Mill Company and contract the coverage out to a group. They would reinsure plans on a periodic basis. No commitments were made.

COMMUNICATIONS REQUIRING ACTION

Request for Reimbursement from OCHAMPUS: OCHAMPUS is requesting reimbursement of \$762.00. Council members felt that a decision could not be made by them since the contract and the law were not circulated. It was felt that something must be done about the matter since it has been lingering on for quite a while.

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★**Diagnosis and Management of Pain Syndromes, 2d Ed.**

By Bernard E. Finneson, M.D., F.A.C.S., 337 pp., \$12.50, W. B. Saunders Company, 1969.

DR. FINNESON'S TEXTBOOK on pain syndromes is a good office text for all physicians and would serve as a guide for house officers and medical students. Based on Dr. Finneson's neurosurgical experience with various painful disorders, it is presented in simple, yet complete form. A wide range of experience, from the joys of treating a simple carpal tunnel syndrome to the frustrations of phantom limb and central pain, is discussed. Symptoms, signs, diagnostic tests and treatment are covered briefly and sufficiently. The text is well illustrated with diagrams and drawings. Adequate information on doing various nerve blocks is provided and several operations are discussed. The observations on placebos are important and should be considered by physicians who use placebos frequently.

Chapters on chest, abdominal, and vascular pains are included. Terminal cancer pain and headache are also discussed. I believe functional disorders will be diagnosed less by physicians who read and use this concise text book.

CALVIN C. M. KAM, M.D.

★**Post-Traumatic Pulmonary Insufficiency**

By Francis D. Moore, M.D., and six contributing authors, 234 pp., \$12.50, W. B. Saunders Company, 1969.

THIS BOOK CANNOT be read without comparing it to Dr. Moore's earlier magnificent classic, "Metabolic Care of the Surgical Patient." It is 234 pages short, succinct, and pertinent; the earlier work is 1,011 pages long, encompassing, and immensely readable. This is a very timely book, and compiles within its covers the knowledge and techniques which have been applied with increasing success in cardiovascular and thoracic surgery. Like a man for all seasons, it is a text for all surgeons, not just those interested in thoracic work.

The order of its contents seems bit reversed, as case histories are discussed in the earlier sections and general principles are kept for the latter portions. The material is timely, interesting, and adequately presented.

The major surgeon would do well to study this text, as much of what is stated will occur in some of his patients. Although the descriptions of the clinical phases and pathological states found in pulmonary insufficiency are brief, they are quite excellent.

The discussions on the clinical and chemical behavior, post mortem findings, and pathologic physiology in chapters four and five and the guidelines in chapter eight are superb. This text is highly recommended.

WALTER Y. M. CHIANG, M.D.

**Progress in Neurology and Psychiatry:
An Annual Review, Vol. 23**

Edited by E. A. Spiegel, M.D., Dr. med (Hon.), 629 pp., \$26.50, Grune & Stratton, 1968.

THIS YEARLY COMPENDIUM, as indicated by its title, covers briefly most of the significant research and clinical approaches during the year 1968.

K. Y. LUM, M.D.

★ means highly recommended.

Todd-Sanford Clinical Diagnosis by Laboratory Methods, 14th Ed.

Edited by Israel Davidsohn, M.D., F.A.C.P., and John Bernard Henry, M.D., 1,308 pp., \$24.00, W. B. Saunders Company, 1969.

THE 14TH EDITION of Todd and Sanford is essentially a new text. Old chapters have been rewritten and expanded. New chapters have been added to deal with areas which, in the light of new developments, deserve special consideration. One example is a section on endocrinology. Within a somewhat limited space, the chemistry of adrenal cortex is, for example, well written. However, major adrenal cortical steroid determinations used presently in clinical laboratories, namely 17-hydroxycorticosteroid and 17-ketogenic steroid determinations, are slated shortly for replacement by cortisol and 17-ketosteroid by testosterone. In the light of rapidly advancing horizons in hormonal chemistry, we can expect expansions here in coming editions. Automation receives a cursory discussion, but in reality, instruments designed for automatic determinations have literally revolutionized clinical laboratories in the past few years.

This text covers problems in laboratory medicine. Starting with the collection of samples, it involves handling of the specimens, methodology, instrumentation, and quality control, to name a few, so that meaningful interpretations can be made. In this sense, the text is aimed at the directors of laboratories. However, by the same token, it is helpful to the physicians who must apply the results of the laboratory studies. It is amazing how rapidly texts in laboratory medicine become obsolete. This edition has been overdue for a few years. It is unfortunate that the work involved necessitates such a large span of years between editions.

PAUL Y. TAMURA, M.D.

★**Cardiac Diagnosis**

By Noble O. Fowler, M.D., 722 pp., \$23.50, Hoeber Medical Division, Harper & Row, Publishers, 1968.

AS THE AUTHOR STATES, this book is succinct and without a vast review of literature, thus providing an excellent and quick reference for general practitioners and internists not oriented strongly toward cardiovascular disease.

The information on each subject is so well condensed and organized and complete that except for unusual circumstances, one need not use the excellent list of current references at the end of each chapter.

An adequate number of illustrations, tables, charts, and electrocardiogram tracings enhance the value of the book.

Medical house staff and nurses in care of cardiacs (ICU, CCU) could also use this book rather productively as one of their practical diagnostic aids.

COOLIDGE S. WAKAI, M.D.

★**The Spine: A Radiological Text and Atlas, 3d Ed.**

By Bernard S. Epstein, M.D., 730 pp., \$35.00, Lea & Febiger, 1969.

THIS BOOK should be of extreme interest to radiologists as well as orthopedic surgeons. The subject is certainly well covered and is profusely illustrated. The quality of

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Sportsmen

Turf diggers: We don't have the complete details, but **Bill Dang** recently won the St. Francis Hospital Tournament by defeating runner-up **Art Salcedo** in match play at Mid Pac Country Club. Back in June, **K. S. Tom** tied in C flight with net 68 and **Allan Leong** won the medal with 78-10—68. At MPCC, **Dick Lam** and **Ike Nadamoto** carded 62 to win team best ball while Ike had 61 in A flight best 8 of 9 tourney to tie with three others. **Art Salcedo** scored a 58 in B flight. Going into July, **Sam Yee** finished 3 up on par to win the match vs. par tournament at WCC and **Tom Fujiwara** was tied for B flight honors also with 3 up. **Allan Leong** and partner were tied with 148 for the team title. At MPCC, **Catalino Cachero** and partner won team best ball with a 62 and **Catalino** also took B flight honors with 55 in the best 8 of 9 Tourney. **Catalino** again teamed up with **Albert Chnn-Hoon** to win team best ball with a 65. **Al** also won in B flight with a net 56. Also at Mid Pac, **Ed Izawa** and **Art Salcedo** won team bestball honors with 59 while **Art** and **Albert Chnn** both had 5 up in Class B. At WCC, **Gil Freeman** was 3 up to tie in C flight. In August, **Kiku Kuramoto** and partner finished with 71 to tie for team best ball at WCC. **Roy Tanoue** was teamed with Governor Burns to win the team medal with 144 points. **Gil Freeman** once again won in C flight.

Golf: Neophyte golfer **Tom Oshiro**, who ruptured his plantaris playing tennis and forthwith took up golf, sank his tee shot on the 200-yard 3rd hole at Ala Wai on September 12, and thus joins the exclusive club of hole-in-oners including **Al Shimomura**, **Al Ho**, **Doug Murray**, **Hideo Oshiro**, **Walter Ozawa**, **Douglas Bell, II**, **H. Yokoyama**, et al. Honest Ray Fujikami will attest to the feat. With enough hole-in-oners around we suggest that there be a special hole-in-one tournament during the annual HMA tournament.

August: **Bozo Chnn**, who has a "juiced handicap," topped A flight at MidPac with 45 points and won the team best ball. **Kiku Kuramoto** tied at 64 for team best ball at WCC. **Art Salcedo** and **Richard Ho** carded a net 63 to win team best ball at MidPac.

September: **Paul Tamura** and **Sam Yee** were in separate teams which tied at 68 for team stableford at WCC.

October: **Sam Yee** won in A flight with 5 up and **Toots Fujii** won in B flight. **Toots** and **Paul Tamura** won in team aggregate medal. **Walter Ozawa** and **Cata-**

lino Cachero tied with **Al Paraz** and **Richard Ho** in team best ball at MidPac. **Diek Omura**, who wields a mighty No. 1 iron, ran away with the Thursday Club's President's Trophy (a stereo AM-FM radio). The computer at MidPac has finally caught up with **Bill Dang** and his handicap is down to a realistic 19. The 18th Annual Maui Open Golf Tournament is dedicated to **Harold Kushi**, one of Maui's most avid golfers and a staunch supporter of major golf events. Harold was for many years a leading contender in local amateur competition and is one of the original founders of the statewide Maui Open.

Nautical Notes: The Lahaina-to-Honolulu race in September was beset with giant waves, blustery winds, excitement, and fear. **Fred Shepard's** "Arjuna" broke her mast and **Fred** rigged a small sail to make it to port. **Ellsworth Harris**, winner of Class A, said, "I've never sailed so fast. My crew, although exhausted, kept the spinmaker flying the whole way, and that's what won it." In October, **Elmars Bitte** was in 3rd place in the Cruising Class while **Les Vasconcellos** won in the 210 Class.

Cards: **Sam Wallis** climaxed a golf vacation to Hayden Lake with a perfect 29 cribbage hand in September. (We learned that the 29 count is to cribbage what the 13-spade hand is to bridge.) **Bill Patterson** was an opponent.

Tennis: The September-October round-robin series of the Sunrise Swingers Tournament ended with the dynamic duo of **Ben Tom** and **Fred Dodge** winning the first place trophies and the slow-starting team of **George Kimata** and **Ted Tsen** winning the coveted last place, barely nosing out the hard-playing team of **Young Paik** and **H. Yokoyama**. . . Three newcomers, **Virgil Jobe**, **Jordon Popper**, and **Larry Gordon** and an attractive substitute, **Sharon Bintliff**, have added zest to this group.

Polo: We are acquainted with the usual hazards of polo playing such as bashed heads and broken necks, but we learned of a new hazard when **Masato Hasegawa** received a check payable to the Primo Brewery, written on his own account. It seems that when polo ponies fall, the rider has to treat his team to beer. **Masato** apparently had had a few spills recently and was in debt to his fellow players.

Racketeers: We are happy to report that those bleary-eyed Sunrise Swingers, though dwindled to a task force of ten stalwarts for the summer, has resumed its Sunday sunrise tournaments. **Young Paik** has joined the group and **Virgil Jobe** needs a partner to join. We learned that **Alex Roth** and **Jim Bennett** had signed up for the

LEWIS E. SHAPIRO, M.D. 1887-1969

Dr. Lewis Shapiro died September 2 at his home in Pomona, Calif. He came to the Islands in 1935 from Chicago.

Dr. Shapiro suffered from very severe, generalized psoriasis and for many years devoted his life largely to pursuing possible cures, however improbable. Hawaiian sunshine was the best one he ever found and it kept him here for much of his life. He and his wife lived in Manoa, at Pukoo on Molokai, in Hana, Maui, and in Makaha.

He interned at Fort Dearborn Hospital and

served as a physician and surgeon for Pan American World Airways at their Clipper maintenance and refueling bases.

He operated the Hana Hospital. Following the war, Dr. Shapiro moved his practice to Makaha where he served as private physician and county doctor until 1956.

He is survived by two sons, **Joseph Shapiro** of Pomona, California, and **Sidney Shapiro, O.D.**, of Oak Park, Illinois, two grandchildren, and one great grandchild.

MARTIN H. LICHTER, M.D.

29th Annual Public Parks Tennis Championships. We failed to see their names in the finals, semifinals, or even the quarter finals, but we know the experience must have been invaluable.

Swabbies: In the Gaylord Dillingham July Fourth race from Waikiki to Kaneohe, **Elmars Bitte**, skippering Calypso, won over-all fleet and Class B honors on both days. **Fred Shepard** in his 37 foot "Arjuna" won Class A honors on both days also. It appears that the medics made a clean sweep.

Rugby: Anyone for rugby? The training season for the Hawaiian Harlequins rugby team opened in August at Kapiolani Park and **John Keenan** was seeking prospective rugby players.

Miscellaneous: **Richard Yon** credits his special conditioning program for Bo Belinsky's recent winning streak. Richard conditioned Bo right out of the minors and back into the majors.

Life in These Parts

An elderly Chinese man walked into **Tommy Chang's** waiting room barefooted. After looking around at the other waiting patients, the man got up, walked out and reentered with the slippers he had left on the sidewalk.

A woman spectator was hit by a foul ball during an Islander game. Someone suggested to Miss Fixit that an Aloha Club card be given to the doctor who attends the Islander team. **Sam Yee** modestly explained that the woman was simply in mild shock with a contusion of the back of her neck and that there was nothing much to do but keep an eye on her during the game (as any good physician would).

Malacologist-physician **Tom Riebert** reported finding the dreaded Crown of Thorns starfish in the Kalohi Channel about a mile out off the south coast of Molokai. Tom caused quite a stir in some quarters when he reported that there were hundreds and if someone searched, there probably would be thousands.

We have an eyewitness report that Shani Wallis, the voluptuous strawberry blond on the Jack Benny Show, perched on **Sam Allison's** lap as she sang at the Ilikai.

The eyewitness says that Sam enjoyed every bit of it . . . (we're simply envious).

Gail Li noticed a strange high-pitched sound in his car as he drove to the office one morning. He raced into his friendly service station and frantically asked the mechanic to investigate. The sound continued even when the motor was cut. The puzzled mechanic opened the hood and tore things apart to no avail. Finally he traced the sound to the glove compartment where he found Gail's radio pager, inadvertently triggered by the compartment door and beeping merrily . . . (well, we all have such mornings . . .).

During the recent disaster drill, a team of 15 physicians on the scene at Radford High triaged the disaster victims in less than half an hour and then had to sit around the next two hours while the buses loaded the moulaged victims for transport to the hospitals. Tom Thorson says that this wasn't half so bad as the case of the GI bus driver during the last disaster drill at HIC, who lost his way en route to Kaiser Hospital (the moulaged school kids, who were enjoying the poor driver's plight, were not about to show him the way, either) and finally had to stop a police officer on Kalakaua Ave. to inquire. The officer took one frightened look at the busful of moulaged victims and cleared the way with his siren!

Jim Bennett is an aerobics proselyte who has been jogging three miles each morning before work. We recently met him looking tawny and fit during the Puna-hou PTO in the library, where he had just donated a copy of *Aerobics* to the librarian with a lengthy spiel on its merits.

Restless **Dan Palmer** is forever reaching for the sky. He formerly scampered over the mountain ridges with the wild goats, but the stars kept eluding him, so he is now taking flying lessons to reach higher.

Dissatisfied with their present images, physicians are trying to alter their appearances in an effort to bridge the generation gap. **Jim Mertz** has adopted a Christ-like countenance with his newly acquired beard-mustache. **Fred Gilbert** looks like Paul Muni playing Louis Pasteur, while **Ted Tseu** resembles Tosh Togo. **Jim Ball** looks vaguely like a shorter Lincoln, with his trimmed

YOKICHI UYEHARA, M.D. 1889-1969

Yokichi Uyehara was born in Okinawa on November 5, 1889, and died in Honolulu August 28, 1969. After completing his preliminary and secondary education in Okinawa, he entered The Jikeikai Medical College in Tokyo, Japan. His alma mater was the only medical college in Japan that used English texts (the others using German or Japanese). After he came to Hawaii in 1918 he studied English in conjunction with furthering his clinical knowledge at Queen's Hospital. He became about the most proficient Japanese physician in the usage of the prevailing language among his compatriots. He was licensed to practice medicine in 1923.

At Waipahu, where he began his practice, he became active in civic and religious activities. Thus when hostilities started in 1941, he was interned with all leaders of the Japanese community for the duration. It was not a question of loyalty that he was so detained, for the American constitution forbade naturalization of Asians at that time and he had to remain an alien, citizen of a country that became an enemy of the United States. Any community leader in that category was suspect and considered a potential danger to the country and incarcerated for the duration as a civilian internee. When war ended and naturalization was allowed, he was among the first to take

advantage of this privilege. He resumed his practice in Kalihi, Honolulu, in 1946, and continued until May, 1969. For the last five years he was on a semiretired basis.

Dr. Uyehara was active in civic affairs, especially in Okinawa relief and in religious orders locally. In addition he was an active sponsor of music and dancing and culture in general originating in Okinawa. For this contribution he was cited by the Japanese government in 1968 with the Order of Sacred Treasure, 6th class, when there was a wholesale recognition of leaders overseas, both nationals and foreigners. Throughout his life he was intensely interested in formal gardens and in Zen Buddhism, for the two go hand in hand. There is a tohiro, a stone lantern, more than three hundred years old, which had graced the premises of Kan Eiji Temple of Uyeno, Tokyo, that is a part of his rock garden in Manoa where he was wont to lose himself in ecstasy and meditation in early mornings and dusk of evenings. He sought quiet and self-discipline in an age of bustle and go-go, and his friends believe he attained that realm of spiritual contentment and enjoyed a full life.

He is survived by his wife, Esther Shizuko, a daughter, Nancy Wheeler, and a granddaughter, Sheri, of Torrance, California.

KAZUO MIYAMOTO, M.D.

beard and sideburns, and enjoys the reaction from his patients who come in, stare, and burst into laughter. **Bob Bell** probably holds the distinction of having been the first with the most.

Members Speak Up

Quiet, personable **Stephen Tenby** got his righteous dander up when he read a book review of *Foreign Medical Graduates in the United States* in the *American Medical News* (June 19). He wrote acrimoniously, "I am a foreign medical graduate and I can categorically state that I do not have a lower level of professional competence than any United States medical graduate, generally speaking. I did not fail the state board examinations and I do not intend to fail the specialty certification boards. Neither do I come from an underdeveloped country (United Kingdom), nor do I feel my presence here is detrimental to the standard of medicine in the United States. I state all of this because the AMA is insistent upon lumping me together with 39,000 other foreign medical graduates as all of one caliber and one standard. I hope in the future, *American Medical News* will take a slightly more balanced approach to the subject of foreign medical graduates, realizing that we are not all tarred with same brush academically. . . ." (We echo Stephen's sentiments, for here in Hawaii we certainly have benefitted from the medical brain drain of other countries, even the so-called "underdeveloped" ones. Australia-trained orthoped **Gabe Ma** has also written a similar rebuttal, but we haven't seen it yet.)

Polo-player-pediatrician-humorist extraordinary **Masato Hasegawa** confided in society columnist Lois Taylor that he was looking for a picture bride for his Irish wolfhound, a pony-sized animal, the only registered one of his kind in Hawaii. "There is a lady Irish wolfhound out around Pearl Harbor, but she doesn't have papers. You know, you have to be so careful about your daughter-in-law." (We admit his recent Italian hair styling gives him a canine look, but only humans can be such prudes.)

When a George Olsen wrote that he will not visit Hawaii and buy our products because we are boycotting California grapes, **Fred Dodge** (who has strong feelings about the underdog) wrote: "I congratulate the Hawaii State Legislature, Governor Burns, the City Council, Mayor Fasi, Representatives Mink and Matsunaga, and Senator Inouye for their warm support and endorsement of the Hawaii table grape boycott. To Mr. Olsen, I can only say that although I disagree with your motives, I would defend your right to boycott Hawaii and its products, just as I hope you defend my right to boycott California grapes. I would only hope and pray that you will eventually defend and support an even more precious human right: that of farmer workers to organize for purposes of collective bargaining. . . ." (Dear Fred: We can do without the grapes, but we do hope we need not extend the boycott to California wine. . . . Sincerely, your boozing friend, H.Y.)

When Model Cities Director Robert Loveless accused the DOE of "irritating ambivalence and sluggish response," **Dick Ando**, chairman of the Board of Education squelched fire with sheer poetry: "We will not let ill-motivated rhetorical barrages against the Department interfere with that mission. . . . I submit that the psychological mechanisms of transference and projection are not therapeutic to his plight. . . ." (There, let Loveless figure that out. . . .)

When **Bob Penington, Jr.**, 61, the competent, respected state epidemiologist, was forced to resign the post he had held since 1967 simply because he failed in the State medical exam, our editor, **Harry Arnold, Jr.**, described the law requiring the exam as "idiotic." Harry asked, "Why in the world should a capable man, well respected at this time, have to take such an examination?" (We learned that even **Harry Shirkey**, our professor of pediatrics, had to swelter for many months,

boning up on basic sciences in order to take the same idiotic exam.)

The ever-prolific pen of **Fred Reppun** produced this criticism of the use of defoliants on State and County roadways on the Windward side: "Not only does this make for an ugly scar on our beautifully green Hawaiian landscape, it also exposes all the beer cans and cola bottles, the litter and trash that friendly weeds help to cover." He asks, "Does rainfall run-off take the stuff into Kaneohe Bay? Might it have killed the plankton upon which the now-extinct bay clams once fed? . . . I have directed appeals to cease and desist from the use of these sprays to both Governor and Mayor in the recent past. Deeds speak louder than politicians' words: Their answer has been to spray more defoliant almost on my doorstep. I don't think the Army has a monopoly on arrogance." (Methinks Fred is having fun again.)

Plastic surgeon **J. Ronald Brown** ("Doctor Honolulu") theorizes that "if you believe you are beautiful, or at least more beautiful than you were before, you can probably get the general public to go along with you. Each of us carries around with him an image of himself. It is this image which determines the decisions that an individual makes all day long. The image is a yardstick of ourselves. If we feel ugly or unworthy we will respond one way to a given set of circumstances, but with more self-confidence, we will respond another way." J. Ronald has gotten into *Psycho-Cybernetics* by a Maxwell Maltz, who believes in changing one's self-image through psychological means. (We wonder how a practicing plastic surgeon would make a living if all women could feel beautiful.)

When **Dick Ando**, chairman of the Board of Education, opined that "no worthwhile physician would take this kind of job (meaning the school physician's position) at that salary (\$19,488)," **Wilbur Lummis**, Deputy Health Dept. Director, repudiated him with "Dr. Ando's concept is 'overtouted' and that physicians taking a public health position are often motivated by 'other things besides money.'" Wilbur feels that "the challenge of the job" is often a more important consideration. (Seems we have been waiting since a year ago for a physician adequately motivated by the "challenge" of *this* job.)

Ob-gyn man **Paul McCallin**, addressing an "Evening with the United Public Workers," said, "Undoubtedly there are a lot of criminal abortions being performed here, but fortunately it's not as bad in Hawaii as it is in California. . . . Here, infection as a result of abortion isn't as likely because most *criminal* abortions in Hawaii are performed by *good* physicians." (Italics ours. A case of semantics, eh?)

When the chairman of the medical board of the Life Extension Institute claimed in a *U.S. News & World Report* article that sudden death may be awaiting some joggers, local physicians were asked to comment. Cardiac surgeon **Dick Mamiya** was cautious: "We really don't have good statistical data saying jogging is bad. I really don't think it is dangerous if done in moderation." Cardiologist **Unoji Goto**, who has been jogging for four years, and seems to believe in predestination, said, "No matter what you're doing, when a heart attack is supposed to happen, it will." He recommended, "If we regularly 'gun' our hearts—as we do automobiles—every two or three days, then the heart will be able to beat more efficiently." HMA prexy **George Mills** felt that brisk walking would be just as good, but not any safer than jogging. President **Bill Sage** of the Hawaii Heart Association added that brisk walking in lieu of jogging, if done too vigorously, can damage your feet. (Well, it's either your heart or your feet—you have a choice.)

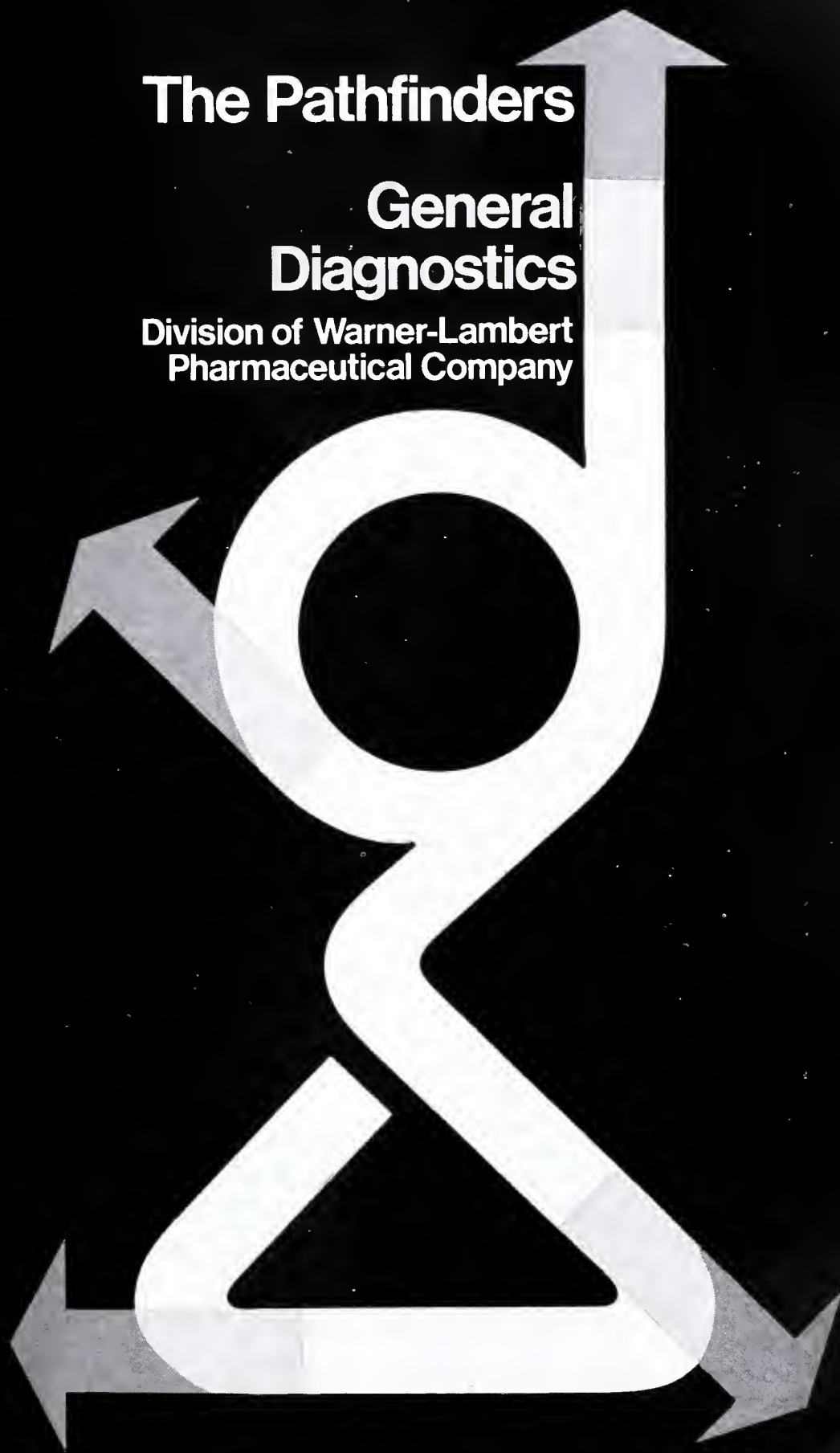
Carl Mason, visiting Kauai, participated in the heroic rescue of a critically injured pig hunter who slipped and fell 200 feet in Waimea Canyon. He complimented the men in the rescue team "who, oblivious to personal danger, rescued Kiyoshi Nakaya in an efficient organized manner. The people of Kauai should be proud to have

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The Pathfinders

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: EDITH G. EKSTEIN, MT(ASCP), U. S. Army Tripler General Hospital

Light Scores Current Health Training

Dr. Israel Light, new Dean of the School of Related Health Sciences in the University of Health Sciences, Chicago, kept his audience listening as well as hearing as he addressed medical technologists in Philadelphia at the ASMT Convention last June. One of a panel of speakers on the Fisher Scientific Education Series in Medical Technology, Dr. Light, who holds his doctorate in education, blasted both his own profession of teaching and that of medicine for their failure to work together in designing education and training for the health specialties.

Among the needed areas of joint concern, he said, is the repetition of what could be common programs of study, and, as an example of the economic inefficiency of curricula most everywhere, cited the case of a university in Kansas where they have four or five courses in elementary anatomy—a course in the medical school, in the graduate division of arts and sciences, in the biomedical engineering department, in the radiological training program, and in the physical therapy program! "Is it possible," he asked, "to identify a number of medical specialties that add up to a single job description that is generic to a series of specialty clusters?"

But before core courses can be utilized, another problem must be overcome—that of academic respectability, which exists on the assumption that education is somehow related to intelligence and competence. "The pathological reliance on education has come to the farcical stage of relating academic grades to occupational success."

As an educator, he is concerned that educational institutions train people for the piece of paper rather than competence on the job. One needs the piece of paper to *get* the job, but not to *do* the job. Dr. Light insists that educational people must also be competent.

There are two smoke screens obliterating possible answers according to the new Dean; the physicians' reactionary resistance to change and the defensiveness of the educators' protection of

the ivory tower. Both are partly right, which means that both are partly wrong.

In closing, Dr. Light challenged the assembled med techs; "One of the most useful and strategic activities your people can engage in is to search for a more equitable and realistic mix of education and training than now is to be found in almost all the health training centers anywhere."

LOUISE WULFF

June Graduates From The University of Hawaii

Listed here are the June, 1969, graduates. Those starred were given a place on the Dean's list (current grade point average of 3.5 or over).

Dianne Amuro—Kuakini

Kun Hi Bang—Queen's

Dianne Campbell—Port Huron Hospital,
Port Huron, Mich.

Barbara Contratto—Tripler

*Linda Harloe—4 + 1—will intern at
St. John's in Santa Monica

*Carolyn Inoshita—Queen's

*Paula Kim—Tripler

*Carol Kunimura—St. Francis

Milagros Lasala Binstock—4 + 1—internship
not decided

*Audrey Liu—Tripler

*Susan Pang—Queen's

*Cheryl Sugiyama—Queen's

*Carol Torikawa—Kaiser

*Mary Turley—Kaiser

*Sosario Villacorta—Tripler

Lizabeth Watanabe—4 + 1—will intern at
Queen's

Karen Yoshida—4 + 1—will intern at
St. Francis

Mitsuno Fukuda Made Honorary Member

More than any other person on campus, Mitzi Fukuda is known to all University of Hawaii medical technology students. Over the years (she



started with the Microbiology Department in 1946) she has acted as the students' academic counselor, job coordinator, teaching assistant, and father confessor. With Mitzi, the generation gap somehow has never developed and students today confide in her and seek her counsel just as they did in 1946. Her bailiwick in the micro de-

partment preparation room has long been a haven for the discouraged, confused, angry—or just plain hungry. There one can always find a pot of tea, homemade cookies, goodies from Japan, and pleasant talk.

But it is not alone the med tech students and the micro department that gratefully receive her help. Other departments in the Snyder-Edmondson complex know that if something is lost, Mitzi will find it; if someone needs help, Mitzi provides it; if an event can't be recalled, Mitzi will remember it.

And so there are many who will miss her on campus, for she is leaving on a six-month leave of absence that may be extended much longer. It was the occasion of her leaving that prompted the HSMT Board of Directors by unanimous vote to make Mitzi a lifetime honorary member of the Hawaii Society of Medical Technologists, the first non-med-tech to be so honored.

The letter requesting Miss Fukuda to accept this membership was read at a surprise luncheon held for her by the microbiology department on August

19. So, while we will miss seeing her in Snyder Hall, it is hoped we will be seeing her at our regular and annual meetings. Aloha and mahalo, Mitzi!

New Challenges Outside The Laboratory

Trying to find an answer to the question put before me concerning the part medical technologists will play in the future in community affairs and politics, I have truly been stumped. Will we become more involved? My honest answer is a slow yes, with a slight questioning tone in my voice. I do realize that more and more of us are progressing to the point where we stand solidly on our own two feet and insist that our opinions and judgments be considered. Just how deeply this will involve us in politics or community affairs is pretty hard for me to predict. However, I do not see the involvement that other paramedical fields might have, the dieticians, the occupational and physical therapists, and those in social service especially. Being just a novice "rock hound," I am not yet skilled enough to tackle the construction of a crystal ball.

Though my personal position is satisfactory, I am not blind nor deaf to the discontent of others in our profession. It was not so long ago that the State medical technicians had to stand up and fight to get a rating comparable with others of like education and background *and responsibility*. If a person gets worked up enough over what he considers an injustice, he will soon fight. He will find a way, in or out of politics, on a state or national level.

As for community affairs, we are slowly but surely taking part; to name a few, the State Fairs, and next (I certainly hope) the Science Fairs. Too many of the Science Fair projects are directly concerned with health and laboratory research for us not to give it wholehearted support. And that support should come in the form of substantial prizes, and using our own judges. ■

ELIZABETH J. HUGHES, M.T. (ASCP)



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citizens of this calibre." With concealed modesty he concluded, "Humbly, I am glad that I was a member of this fine group of men." Great . . . great . . . great. . .

Bob Bright, who now lives in Naalehu, Hawaii, thought the controversy regarding large scale developments as planned by the Boise-Cascade people brought to mind Parkinson's Third Law of Economics: "Expansion means complexity and complexity means decay. . . . Good planning should minimize the complexity, as Parkinson said, to postpone as long as possible the inevitable decay." (Bright thoughts emanating from a Bright fellow.)

Our familiar critic, **Fred Reppun**, felt compelled to comment on socioeconomist-philosopher Theobald's article *Right to Service versus Right to Strike*. Theobald feels strikes are against the public interest and that strikes are a "power play" benefitting both labor and management while the public pays twice—first in inconvenience and later in increased costs. Fred feels that the recent marches by first the blue collar and then the white collar workers were no less a power play and a veiled threat against the legislators in session. "Any of these marching groups, walk-ins or sit-ins, big as they may be, are a minority of the total citizenry. The minority was exerting threats against the majority—the majority being represented by elected representatives. . . . A pure representative democracy depends for its very existence on the social ethic: that the decision of the majority be based on free and open discussion preceding a vote. Power plays, be they in the form of bribery or threats tendered by lobbyists, strikers, or protest marchers, destroy democracy by undermining the freedom to decide by majority vote. . . ." (And that's no humbug, fellows.)

Professional Moves

Keeping with the tempo noted in the summer months, Homo Sapiens Medicus continued to migrate. In August,

internist **Joseph Palma** joined **Mor McCarthy** and **Philip Foti** in Kailua and internist **Jack Scaff** continued to swell the ranks of the Honolulu Medical Group. Going into September, pediatrician **Sandra Smith** joined the Hilo Medical Group. Surgeon **Herminio Mercado** opened at Waianae and ob-gyn man **Joseph Brock** and internist **Robert Anderson** associated with the Windward Medical Center. We wondered why surgeon **Walter Chang** was moving until we discovered that this **Walter Chang** was an allergist. Allergist **Walter Chang** joined the Chock-Pang Clinic. (Having similar last names may be trying enough, but to have similar first and last names may be catastrophic for physicians. . . .)

Two years ago, the Army must have felt it needed urologists in a hurry and inducted two of our just starting urologists. Both urologists, both Jameses, are now back in town. **James Stewart** rejoined the Honolulu Medical Group and **James Young** has located in the Continental Bldg. Allergist **Arthur Neilson** relocated at 1600 Kapiolani Blvd. and internist **Robert Olman** joined the Honolulu Medical Group. Out in Waiialua, surgeon **Eric Altenbernd** joined the Waiialua Clinic-Hospital.

On the island of Maui, internist **Robert Moser** concluded a long and distinguished military career, including a tour of Tripler as assistant chief of medicine and a last assignment as clinical professor of medicine at Georgetown University and chief of medicine at Walter Reed MC, and joined the Maui Medical Group, soon to move into the Wailuku Hotel building.

On the Health Dept. front, **Bob Marks**, who has been practically synonymous with the Lanakila Health Center, has retired and left on an extended freighter trip to South America. **Kirsten Vennesland** took over. During Bob's 25-year tenure, more than 2.5 million chest films were examined, and about ten per cent of all lung tumors found in Hawaii were found this way. Bob listed four milestones in his career: the great ex-

continued page 156



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A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."^{*} However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A[®] base.[†]

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is

practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.

^{*}McClarín, W. M., and Knox, J. M.: *Cutis* 3:619 (June) 1967.

[†]The MICEL A[®] base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.



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Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.



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pansion of mass x-ray testing; the abolition in 1947 of a means test for Tbc treatment; the advent of effective drugs for treating Tbc, enabling patients with active disease to be treated at home; and the chemoprophylaxis program, started in 1964.

Suk Jeong Ju Hahn recently completed her residency in psychiatry at Queen's and joined the Diamond Head Mental Health Clinic. Psychiatrist **Joseph Bail** from San Jose, Calif., also joined the Diamond Head clinic, and Psychiatrist **Kosta Stojanovich** joined the Mental Health Team for Courts and Corrections.

Kaiser Hospital, which participated in the field trials of measles vaccine in 1963, and the mumps vaccine in 1967, has given rubella vaccine to 1,500 children since October last year. Commenting on the results, **Alex Roth**, chief of pediatrics, reports that "the vaccine provided immunity in 98 per cent of those vaccinated; there were no ill effects, it is safe, and it does not cause transmission to susceptible close contacts. The only question is how long the immunity will last without a booster." The Waianae community leaders voted for a hospital at Nanakuli during a review of the Conway Report, which proposes a 75- to 100-bed nonprofit hospital combined with a 50-bed nursing home. Hospital consultant Ralph Conway, now associate professor of public health at the University of Hawaii, urges also that the Kaiser Foundation be associated with its operation, to care for the 4,700 Kaiser Plan members in the Waianae coast area. (It took four years of concerted effort and practically an act of God to get a full-time physician to practice in Nanakuli, so we wonder what it is going to take to get a general hospital going.) Scott D. Hamilton Jr., President, Conservation Council of Hawaii, is asking physicians and the HMA to join their fight against air pollution, noise control, and other environmental problems. He points out that Gerald Dorman, the new AMA president, has urged physicians to "put aside private interests" and join the fight against air pollution by fumes and noise. The U. of H. Medical School has a problem. It won a \$445,000 Dept. of Defense research grant to combat malaria and dengue fever, but only 5 per cent of the grant can be used for the renovations needed at Leahi Hospital to conduct the research. Of the \$162,000 needed for the renovations, \$62,000 has been made available through the School of Medicine, Straub Institute, Castle Foundation, and McInerny Foundation. Another \$100,000 has to be cajoled from nongovernment sources, but where? With the present furor over excessive Medicare payments, **Michael DeBakey** and **Denton Cooley** were listed as the top two in the nation, having received \$202,959 and \$193,124 respectively. A Miami osteopath was paid \$191,000. DeBakey was paid for 642 operations and Cooley for 408. The monies went into a fund at the Baylor College of Medicine. But what about the osteopath? Gov. John Burns signed into law Act 31, which shortens the period within which medical reports by doctors and hospitals shall be filed in Workmen's Compensation cases. (As their fee schedule now stands, it may not be worth sending in the forms anyway.)

It was heartwarming to read these comments by Robert Millar, the Medicaid administrator at DSS: "The physicians on the teaching staff of the hospitals have given their time in inpatient medical care, surgery, and obstetrics, as well as supervision of the outpatient clinics. This is strictly a donation—strictly voluntary. Physicians are always being kicked in the teeth for one thing or another. The public doesn't realize the amount of time—on top of the percentage of charity practice in their own offices—that they have given for inpatient and outpatient care. What they have been doing over the years amounts to a tremendous sum...and they deserve some plaudits." Title XIX is expected to increase the State's medical costs about \$450,000. "Physicians who have donated their time to welfare families at the hospitals have saved the State at least this amount annually." (Thanks, Bob... We didn't realize anyone even knew.)

Martin Lichter has his hair styled by Fritz Andre in the Ala Moana Center. Martin says, "I have my hair cut here because when you get a little older, you need a better image. Especially if you've been recently remarried." (We recommend toupees for those less richly blessed by heredity.)

The National Retail Merchants' Association blames the birth control pill for a 19% dip in maternity clothes sales during 1968, but the maternity wear retailers in Honolulu refute this claim, for they have not noticed any appreciable drop here. (Perhaps we are just more prolific here in the Islands.)

Elected, Appointed, Honored

Traditionally, the chiefs of staff at Queen's have remained in office much too long. When **Mort Berk** was elected last term, he insisted that he would serve only one term. True to his promise, Mort resigned and psychiatrist **K. Y. Lum** was elected the new chief at the recent quarterly meeting.

Clifford Strachley was installed as president of the Oahu unit of the American Cancer Society and **William Hindle** elected a board member. **Paul Tamura** was elected the new president of the Hawaii division of the American Cancer Society and **Harold Bitner** was named chairman of the executive committee, with board members including **Robert Rigler**, **Harry Arnold, Jr.**, **Clifford Strachley**, **Herbert Uemura**, **Jose Romero**, **George Bracher**, and **Drake Will**. We note also that **Rodney West** was elected a director of the Better Business Bureau.

When **Peter Kim** retired as Kauai Health Officer, he was honored at an Aloha dinner by the Hale Aina staff. **Richard Cardines** is his replacement.

Visiting Physicians

Irving Schulman, the visiting professor at Children's Hospital for July and August, was a sinewy, swarthy, dynamic intellectual from the University of Illinois Pediatrics Dept., who gave understandable, down-to-earth lectures on hematological and vascular disorders without causing the usual post-luncheon sopor. Irving has the rare talent of a knowledgeable lecturer who is at home in practical hematology as well as in exotic disorders like pseudothrombophilia.

We listened respectfully to **Walter Alvarez**, whom we regard as one of the great clinician-philosophers of our time. Dr. Alvarez is aging; he admits, "I have had 30 to 35 little strokes myself... they are frightening... they come on as dizzy spells, take away a little memory and make me a little unsteady on the feet..." But still no one can equal the wit and humor of his simple medical anecdotes and the lessons gathered therefrom. He credits his diagnostic acumen to leisurely history taking and feels that physicians should spend at least one hour with each patient instead of the usual ten minutes. In one of his anecdotes he related how one of the leading bankers in the country came to the Clinic with chronic diarrhea which had been thoroughly investigated. "Dr. Charley (Charles Mayo) told me, 'Ask his wife what is wrong, and she will tell you.' I asked her and she told me that his diarrhea was caused by depression. Sure enough, we treated his depression and his diarrhea stopped..." Another time, a farmer's wife came in with diarrhea. Remembering Dr. Charley's advice, I asked her husband. He told me that she got the diarrhea from his chickens who had diarrhea. He was right, because when we checked, she had tuberculosis contracted from the chickens..." Dr. Alvarez says that diagnosis can be easy if we simply look at and talk to our patients and take adequate family histories. Other little Alvarez gems: "I was reading Socrates the other day and there it was, a perfect description of our modern hippies..." When patients try to conceal the truth and lie to us, frequently they are afraid of some mental illness..."

Following in the wake of **Paul J. Sanazaro** who two years ago did a preliminary study on the quality of medical care in the State, **Beverly C. Payne**, assistant dean of the U. of Michigan Medical School, arrived for a weekend of consultations. The HMA in conjunction with the U. of M. will seek a substantial Federal grant for a study of local office practice and hospital care, and plans are to begin community data collection in February.

Charles Berry, chief NASA physician, speaking at the 21st Annual Pacific Dermatologic Association conference in August, described the nuisance problem of dandruff in the astronauts caused by the limited bathing opportunities and the weightless state. He described how "a cloud of dandruff floating around their heads" could be a distraction factor. (Space angels with dandruff halos?) Future astronauts will be able to zip themselves into a newly developed bag, add water, wash, and then remove the water by vacuum. . . . Such are the trials of space travel . . . the little things. . . . True or not, local columnist **Eddie Sherman** credits **Irving Page** with coining the phrase, "get off your big fatty tissues."

Transplant Symposium (Oct. 12-13)

One of the best bargains in recent years has been the symposium on Human Organ Transplantation sponsored by the Honolulu Medical Group Research Foundation. For a nominal \$15.00 registration fee we attended two morning sessions and an evening banquet for two at the Ilikai replete with cocktails.

As we turned into the HIC parking lot on Sunday morning, a stony-faced not-too-bright lot attendant growled, "Park to your right . . . show's over there." With the World Series being telecast live, the attendant probably thought it must be some show for so many to come out, on a Sunday morning at that. A dapper **Vi Hay-Roe** gave with the welcome spiel and introduced **Dean Cutting** who promptly relinquished the podium with the remark, "Nobody stayed away from TV this morning just to hear me talk." Program chairman **Dick Blaisdell** gave with a cheery "mahalo" and described **Irvine Page** as "the distinguished clinical scientist, scholar, editor, and himself a phenomenon of our times. . . ." Irvine Page prefaced his talk, *An Introduction to Organ Transplantation*, with the confession, "I am by nature a nasty person and it took me 65 years to find this out, but on the other hand, we need a person like me. . . . What doctors say at cocktail parties and in public are two different things, so a little bit of controversy is a good thing." We soon discovered that one mark of a great speaker is that he can ramble and yet sound coherent and interesting. The following are excerpts from Dr. Page's ramblings: "We ask, why indict an amorphous group like the transplanters (referring to the heart transplanters). . . . Some are great and some are just plain lousy. . . . What we need to ask is "What are the priorities we want in life? My quarrel with the transplant boys

is that they have tried to ignore scientific procedures. . . . Medical people have no way of expressing themselves. . . . The AMA has no way of expressing itself because it is such a large organization; it has to be a consensus. . . . Consensus is a good thing, but not always. . . . The government, recognizing that consensus of the majority is a weakness, has moved in. . . . We should have a National Academy of Medicine which can take its place with the National Academy of Science. . . . You know scientists are just plain awful. . . . They have to be awful to be good scientists . . . but they have managed to weld themselves together. . . . Make no mistake about it. Government policy will determine what course medicine will take. . . . There is creeping Federalism. The Supreme Court says, "There is no such thing as a government grant without government control." In the transplant field we are already seeing this. . . ."

Dick Blaisdell introduced **Robert Good** from the University of Minnesota, who talked on *Rejection Phenomena: Basic Immunologic Concepts*. Dick described the rejection phenomenon as "some tissues have the 'Aloha Spirit' and accept while others do not and reject." Bob Good, a hulking, droopy-eyed, computer-brained lecturer with a booming voice, spouted a staccato of facts and information, too rapid for us lesser-endowed to digest. He seemed to cram what must have been a semester's course into a half-hour lecture (he later apologized that he was a bit rushed). We did understand his introductory joke, though, so all was not lost. Bob said: "Speaking after Irving Page with his relaxed manner reminds me of the Indian out on a desert 25 years ago who was sending out smoke signals when he saw the awesome atomic blast and said, "Chee! I wish I had said that. . . ." We also gathered a few pearls here and there such as "Cellular-immunological deficiency shows a ten to twenty per cent increased incidence of cancer while humoral immunological deficiency results in leukemia. Every known carcinogen is immunosuppressive, and all tumors have immunosuppressive agents. The immunological mechanism has anticancer properties."

After the barrage, we staggered to the coffee and doughnut counter to restore our benumbed neurones. **Thomas Starzl** from University of Colorado was a slower-paced lecturer, more our speed. He complained, "Mother said never follow a banjo act, but she never said what to do when there were two banjo acts." Tom reviewed his experiences with his three kidney transplant series. Following his second series (1964 to 1966) of 42 cases, in which histocompatibility was the theme, he concluded that matching was not the answer. His present triple drug regimen (prednisone, Imuran, and ALG or ALS) was started in June, 1966, and in this series, he has a 95 per cent or better survival rate with related donors and a 90 per cent or better rate even with nonrelated cadaver kidneys. The problem with liver and heart transplants, he pointed out, is that there is no mechanical support system available like the kidney machine. ■

(To be continued in next issue.)

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Dr. Hatt was married in Boston on March 9, 1918, to Dr. Ednah Swasey of Salem, Massachusetts. They had three children: Dr. William Swasey Hatt, Mary Elizabeth (Mrs. William P. Box), and Constance (Mrs. Olaf Passburg).

Dr. Grover A. Batten in his sketch of Dr. Hatt published in the *HAWAII MEDICAL JOURNAL* of July-August, 1949, writes, "No patient under his care ever entertained other than hopeful anticipation of the ultimate outcome. All who came in contact with him felt that if it was humanly possible to effect a cure or improve a crippled individual sufficiently to enable him to lead a normal life, Dr. Hatt would be able to do it."

And from the *Journal of Bone and Joint Surgery* of July, 1949: "The memory of Nelson Hatt will remain indelibly inscribed in the minds of those who knew him or who have had the privilege of coming in contact with him. His fine fellowship was a boon to many an old and many a new friend. His service to every community in which he lived was not only gladly and graciously given but was of lasting value. He led a full life, a genial one, and gave all he had each day. To quote Dryden as a fitting epitaph—

'Happy the man, and happy he alone,
He who can call today his own;
He who, secure within, can say,
Tomorrow, do thy worst, for I have lived
today.' "

Hawaii Medical Ass'n continued from 146

ACTION:

It was voted that this matter be referred to the Finance Committee for further definitive action and that the committee report back to the officers and Council at the next meeting.

Department of Health Request for Cosponsorship of Environmental Control Conference to be held October 20-24, 1969: The HMA has been asked to cosponsor this conference.

ACTION:

It was voted to cosponsor the Conference on Environmental Control.

Request from the Medical Education Committee for SAMA support: SAMA is presently in need of additional money to cover cost of developing a program presentation for Honolulu County Medical Society and for other activities, such as weekly seminars, designed to

acquaint the students with the many problems facing physicians. It was noted that many state medical associations are involving SAMA students in their committee activities and some have asked them to serve as voting members on key committees.

ACTION:

It was voted to appropriate \$100 for SAMA.

SECRETARY'S REPORT

The secretary recommended that all roster changes reported by the counties for the months of July and August be accepted and approved.

ACTION:

It was voted to accept the report and recommendation of the secretary.

REPORT OF THE TREASURER

The treasurer reported that an additional secretary had been employed which necessitated the purchase of one more typewriter and installation of another extension telephone. It was noted that two additional filing cabinets are also needed. Discussion was held on the car allowance for employees.

ACTION:

It was voted that the required office equipment be authorized. There was discussion regarding a central filing system for the office and the utilization of a telephone answering service.

It was pointed out that a consultant firm had been retained and that these recommendations should be made to Peat Marwick & Mitchell for inclusion in their overall report.

ACTION:

It was voted to refer to Peat Marwick & Mitchell the suggestion that (1) there be a central filing system, and (2) that there be a telephone answering service.

Other items of the budget were discussed. It was noted that the HAMPAC budget item is for educational purposes. A question was raised regarding the Peters report that was done in 1963 and whether it had been circulated to the members of the Council.

ACTION:

It was voted that the Honolulu members of the Council review the Peters report that was done in 1963 in the HMA offices, and that a copy of the report be sent to the neighbor island members of the Council.

In regard to suggestions and questions regarding the operation of the HMA office, Dr. Lowrey asked that each member of the Council write directly to Peat Marwick & Mitchell and ask that their questions be answered. He further explained that he had spent considerable hours with them and had given them the information he had collected from the office staff.

ACTION:

It was voted to accept the report of the treasurer.

It was noted that Dr. Lowrey gave up much of his vacation working on a personnel policy. He has also spent many hours with the management consultant firm giving them information necessary to conduct their study.

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John Dryden

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Hawaii Medical Ass'n continued from 158

ACTION:

It was voted to give Dr. Lowrey a vote of thanks and confidence for the work he had done.

REPORTS OF COMMISSIONS AND COMMITTEES

Commission on Education and Scientific Research: Although there were no recommendations from the Commission on Education and Scientific Research, Dr. Lee felt the Council should be advised of the activities of CHEC. He pointed out that in this report, which was approved by the House of Delegates, it was recommended that there be two HMA members on the Executive Committee of CHEC. CHEC has been meeting regularly and Dr. Robert A. Nordyke serves as the HMA representative. The Executive Committee of CHEC does not feel that HMA should have two members on the Executive Committee.

ACTION:

It was voted to accept the report of the Commissioner.

Commission on Internal Affairs: Dr. Wakai asked Dr. Sloan to report on the arrangements for the annual meeting. Dr. Sloan reported that Dr. Dorman will attend the annual meeting and has been invited to speak to the Chamber of Commerce on Thursday, May 7, 1970, prior to the House of Delegates meeting. Since all doctors are expected to attend, it is requested that the Council react to delaying the meeting of the House of Delegates on Thursday in order to hear Dr. Dorman.

ACTION:

It was voted to open the Thursday session of the House of Delegates at 2:00 P.M.

It was noted that four speakers have accepted HMA's invitation and that \$4,400 has been received in financial support. The Exhibits Committee has asked to add the names of other organizations to the list of exhibitors.

ACTION:

It was voted to accept the list of names submitted and any other organizations who fall within the ground rules outlined for exhibitors.

A letter received from the American Medical Golf Association asks whether it would be possible for their association to extend their spring tournament to Hawaii. The Council agreed that they should be invited to participate in the annual meeting and that they would be charged the regular registration fee. It was suggested that Drs. Sloan, Wakai, Chun, and Tomita meet with Mr. Weidknecht to work out further details.

ACTION:

It was voted to accept the report of the Commission on Internal Affairs.

Dr. Wakai gave a breakdown on the policies of state medical associations on accepting funds or subsidies from pharmaceutical firms and other outside organizations.

Dr. Sloan advised the Council that Dr. Dorman will attend the Pan-Pacific Surgical Conference in October and that a dinner is being set up for the officers and councillors to meet with Dr. Dorman. No-host cocktails and dinner will be held at the Tripler Officers Club on October 19. It was suggested that Colonel Reid, who has assisted in obtaining the Officers Club for the evening, be invited as a guest of the HMA. It was also suggested that General Whalen, and the surgeon gen-

erals of the Navy and Air Force also be invited as guests of the HMA.

It was noted that Dr. Dorman has been invited to Hilo on October 18. Dr. Iaconetti asked if it would be possible for Dr. Dorman to visit Maui on October 21.

ACTION:

It was voted to extend an invitation to Colonel Reid, General Whalen, and the Surgeon Generals of the Navy and Air Force to attend the dinner on October 19 to meet Dr. Dorman.

Commission on Legislation: Dr. Goto reported that the Legislative Committee had met once and considered job specifications for the legislative counsel and legislative secretary.

ACTION:

It was voted that the job description of the legislative secretary be submitted to Peat Marwick & Mitchell to be incorporated in the over-all study.

The National Legislation Committee recommended that the Council approve the principal of national health insurance. Mr. Layton explained that the AMA will submit a bill to Congress on national health insurance, referred to as "Medicredit," which will enable persons with lower incomes to purchase health insurance, the cost to be based on their IRS returns.

ACTION:

It was voted to accept the recommendation of the National Legislation Committee to support the principle of national health insurance.

The Council was asked whether there was any objection to adding additional committee members to the Medical Practice Act Committee. There was no objection.

Dr. Iaconetti asked the committee to ascertain whether or not osteopaths do indeed take the National Medical Board examinations as he had heard. It was noted that the Medical Practice Committee should work closely with the osteopaths to develop a legislative proposal regarding a single medical practice act.

ACTION:

It was voted to accept the report of the Commission on Legislation.

Commission on Medical Services: The report of the Commission was noted. Funds were requested for the Workmen's Compensation Committee to bring neighbor island representatives to Honolulu to attend the public hearing on the Workmen's Compensation Fee Schedule. It was felt this would eliminate the necessity of having the legal counsel, president, and committee chairman travel to all the islands for the hearings held outside Honolulu. It was noted that hearings will need to be held on all islands, according to the Director of Labor's interpretation of the law. Funds will be required for the services of the legal counsel to present testimony at the Honolulu hearing. Funds are requested for air fare and per diem for the five neighbor island representatives.

ACTION:

It was voted to appropriate funds for the neighbor island representatives to attend the Workmen's Compensation hearing in Honolulu to cover the air fare and \$35 per diem rate. It was voted to accept the report of the Commission on Medical Services.


Commission on Public Health: Dr. Sia reported that the Cancer Committee had reviewed a proposal on a

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Smoking Withdrawal Clinic being planned by the American Cancer Society. The committee recommends approval of the principles of the Smoking Withdrawal Clinic.

ACTION:

It was voted that the HMA support the principle of a Smoking Withdrawal Clinic as presented by the American Cancer Society.

Dr. Sia noted that the School Health Committee endorsed the concept that the HMA go into the schools for mass immunization programs with the DOE for the Waianae-Nanakuli area, especially during the rubella vaccine pilot study. He also reported that the Communicable Disease and Immunization Committee endorsed the rubella vaccine program in the Model Cities areas. This committee also reviewed the Hansen's Disease regulations and approved Draft No. 3.

The Mental Health Committee has sent out a questionnaire on comparison of psychiatrists' incomes during the past ten years.

Dr. Sia discussed the recommendations of the Maternal and Perinatal Mortality Study Committee and expressed concern regarding the sum of money appropriated for family planning clinics on Molokai and in Kona. He further explained that although the HMA is not opposed to family planning clinics, that the sum of money could perhaps be utilized in a more profitable fashion.

ACTION:

It was voted that Drs. Goto, Sia, and Mills make a personal appearance before the Governor and present the facts in regard to the family planning clinics on Molokai and Kona.

The Maternal and Mortality Study Committee recommended that an in-depth study be made in regard to short courses on Maui in midwifery.

ACTION:

The Council voted to refer this matter back to the Maternal and Perinatal Mortality Study Committee and suggested that requests for courses in midwifery on Maui be made by Maui County's Department of Health to the State Department of Health.

Dr. Sia informed the Council that the Child Abuse Center at Children's Hospital had been approved and will become operational on October 1.

Commission on Public and Interprofessional Relations: Dr. Goebert reported that the Careers Committee met with various representatives of the allied health professions and with the Woman's Auxiliary. They are planning a program on health careers for mid-February. There was some discussion on the formation of a Health Careers Council, similar to that which has been set up by CHEC, involving all the allied health professions. In the past, an annual Careers Day has been held involving only careers in medicine. At the last House of Delegates meeting it was suggested that the program be expanded but that the HMA would cover that part of the program relating to careers in medicine. It will need to be decided whether such a Council should be formed and given autonomy or whether the Careers Committee should proceed as in the past.

ACTION:

It was voted that, rather than a Health Careers Council, the HMA Council authorize a Health Advisory Committee to the Careers Committee; the Advisory Committee to be made up of appropriate people in the allied health professions.

Several questions were presented regarding the budget for a Health Careers Day such as who would provide the clerical help, lunches, etc. It was felt that perhaps funds could be collected from the various organizations, including HMA, and be placed in the 501(c)3 corporation of the HMA. It was suggested that the Careers Committee be allowed to work out the details and report back to the Council.

A special meeting has been planned for mid-October by the Medicine and Religion Committee when Rev. Dr. Paul McCleave, Director of the Medicine and Religion Department of the AMA, will visit Hawaii. Additional funds will be needed for refreshments, etc., for that meeting. It was also noted that the counties of Maui and Hawaii would like Dr. McCleave to visit them. Additional funds to cover this visit to Maui and Hawaii are needed.

ACTION:

It was voted to appropriate \$170 for the Medicine & Religion Committee to be used for Dr. McCleave's visit.

Unanimous Opinion of the Council: The Council is in total agreement that what was passed at the last House of Delegates was that the Council could spend up to \$500 on each individual item.

The Message of the Month Committee recommended that the Council consider placing a monthly newspaper ad instead of printing the usual hand-out message of the month if this proves feasible. The ad would be placed in the same location each month, probably near the section on Honolulu events.

ACTION:

The Council voted to approve the recommendation that the Message of the Month be in the form of a newspaper ad each month.

The Public Relations Committee asked the Council to consider an appropriation of \$400 to be used to operate a complaint center called "Pulse Line" for the balance of the fiscal year. This center would be similar to *Kokua Line* and would be handled by an answering service. The monies would be used for advertisements so the public would know where to call. It was pointed out that this matter should be left to the component medical societies who already have mechanisms to handle complaints.

ACTION:

It was voted that this item be referred to the component county medical societies.

Finance Committee: The Chairman of the Finance Committee, Dr. Herbert Y. H. Chinn, presented the report of his committee. The Council was asked to react to securing "Life and Accident Insurance" for individuals traveling on HMA business. Members of the Council felt that the Finance Committee should pursue this matter further and bring their recommendations back to the next Council meeting in December.

The Council was asked to act on the Committee's request for disbursement of \$400 from the Physicians' Benevolent Fund. Further information was given the Council on the status and need of the physician.

ACTION:

It was voted to approve the disbursement in the amount of \$400 from the Physicians' Benevolent Fund.

The Council was asked to take action on the Committee's recommendation to pay Mabel Smyth Building for its September maintenance which includes the increase in rent. This item was brought up at the last Council meeting and it was voted to have an appropriate letter written to the Mabel Smyth Board expressing the

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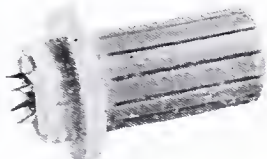
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opinion of the Council that the increase of rent is not a budgeted item, and that Mabel Smyth did not give the HMA enough warning that this increase was forthcoming, and that the HMA is unable to pay the additional rent increase. The Finance Committee discussed this matter because subsequent to the last Council meeting a statement, which included the increase, was received from the Mabel Smyth Building for the September maintenance.

ACTION:

It was voted to pay Mabel Smyth Building the monthly rent to include the increase.

UNFINISHED BUSINESS

Management Consultant Services: Dr. Lowrey reported that the House of Delegates at its last meeting appropriated funds for the services of a management consultant. At the last Council meeting proposals from Rothrock, Reynolds and Reynolds and New Management Center were circulated to the Council. One organization wanted \$5,000 to start. It was felt by the officers that this was too expensive. Subsequent to those proposals, an offer was made by Peat Marwick & Mitchell for \$2,300 plus travel and other expenses. Dr. Lowrey asked this organization to propose a firm figure and they agreed to do the study for \$2,400.

Implementation of Resolution No. 14 Re Community Health Planning: This matter was discussed at the last Council meeting and at that time it was recommended that an ad hoc committee be established. The President reported that an ad hoc committee is being appointed and the following members will be asked to serve: Drs. Gordon Liu, Garton Wall, Clifford Druecker, and Bunzo Nakagawa. Dr. Mills stated that he has not appointed neighbor island members to the committee but asked that each neighbor island councillor take this matter back to his society and submit names of physicians to sit on this ad hoc committee.

Sponsorship of an event for the American Association of Medical Assistants' October Convention: This matter was discussed at the last Council meeting and at that time it was voted that the matter of sponsoring light refreshments for the National Convention of Medical Assistants be left to the discretion of the HMA Officers. The officers discussed this matter and felt that since the HMA bought space in the American Medical Assistants' publication, that in itself would be a sufficient donation to the Medical Assistants.

Report from Dr. Richardson re Formation of Associations in Honolulu Hospitals: The report of the Hospital Committee which met with representatives of the various hospitals who are forming associations within their hospitals was circulated, reviewed, and discussed.

It was reported that this situation will be pursued further by Dr. Richardson, Mr. Will Henderson, and one other person and that the HMA Council will be kept informed.

NEW BUSINESS

Report on HCMS ad hoc committee to Study Membership Requirements: Dr. Tom reported that the Honolulu County Medical Society took action that a committee be established to study HMA and AMA membership requirements. The following doctors were appointed to serve on the committee: Drs. Arnold, Jr., William Dang, O. D. Pinkerton, Richard Ando, and Frederick Dodge. This matter was brought before the Board of Governors and the Board was opposed to any change in membership requirements. Before any changes can be made, this matter must be brought before the House of Delegates. It was suggested that all Council members attend the HCMS membership meeting on Tuesday, October 7, when this is discussed.

Woman's Auxiliary to HMA involvement in AMA-ERF fund raising activities: This matter was brought up because the HMA's AMA-ERF Committee's only func-

tion comes at the end of the year when it helps in the fund-raising project which is sponsored by the Woman's Auxiliary to the HCMS. Mrs. Mills, who represented the Woman's Auxiliary to HMA, advised that they do have a committee whose chairman is Mrs. Unoji Goto. She stated that the Woman's Auxiliary to the HMA stands ready to help in any capacity.

Correspondence from Dr. Livingston Wong: Two letters were received from Dr. Wong—(1) A letter dated September 26 requesting laws from various states defining death and an exploration of means to incorporate the definition of death in our statutes. Dr. Mills asked that Dr. Mamiya follow up on this matter and perhaps develop a law through the Legislative Committee. (2) A letter from Dr. Wong regarding a memorandum from the Department of Social Services on renal transplants stating that the DSS will not reimburse for renal transplants since this is an experimental procedure. It was recommended that a letter be sent to DSS stating that renal transplantation is an accepted therapeutic surgical procedure.

Correspondence from Dr. Wm. Sage: A letter was received from Dr. Sage, President of the Hawaii Heart Association, asking for support of a proposed project for phonocardiogram screening of children in Hawaii to detect heart abnormalities.

It was recommended to refer this matter to the Heart Committee for study and recommendation and to report back to the Council at its next meeting.

Correspondence re the Establishment of a Community Health Center in Leeward Oahu: It was reported that Dr. Neal L. Gault, Jr., Associate Dean, University of Hawaii School of Medicine, is gathering data in this area to recommend to the Governor whether there should be such a Center. It was further reported that the Honolulu County Medical Society has been involved in this matter and that an advisory committee was appointed whose members are Drs. Richard Omura, Winfred Lee, and Gordon Liu. It was recommended that a summary of the proposal should be sent to members of the Council.

Release of Statistical Data: This was one of the items requested to be discussed under New Business. It was felt that statistical data which the HMA has should be open, and not be restricted to particular groups or individuals. It was pointed out that statistical data can be utilized by reasonable individuals or groups and that the decision of the House of Delegates was not to prevent release of information.

Registration fee for HMA Members for Annual Meeting: This was an item requested to be discussed under New Business. It was suggested that in order to predict the number of physicians attending the annual meeting, that a registration fee be imposed on the HMA members. It was reported that because of the increase of membership dues, the House of Delegates voted that the registration fee for the annual meeting be waived for HMA members. It was recommended that if such a change is to be made that the Arrangements Committee be requested to make this recommendation in its report to the House of Delegates.

Change of Council Meeting Time: It was suggested that the Council meeting be changed to another day and some other time.

ACTION:

It was voted to poll the members of the Council in regard to changing the Council Meeting to another day and time.

It was suggested that the meeting need not be held at the Oahu Country Club, as in the past, but could be scheduled for the Mabel Smyth Conference Room as it is presently being conducted.

Report from Mr. Richard G. Layton, AMA Field Representative: Mr. Layton reported that the AMA Clinical Meeting will be held in Denver, Colorado, late November and early December. He said that the deadline for submitting resolutions to the AMA is October 20.

Mr. Layton reported that a Medicaid Task Force has

continued page 167

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*Lyons, H. A.: J.A.M.A. 194:1234, Dec. 13, 1965.

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Contraindication: Use of isoproterenol in patients with preexisting cardiac arrhythmias associated with tachycardia is generally considered contraindicated because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged as it may lose its effectiveness.

Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn. Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Epinephrine should not be administered with Isuprel, brand of Isoprote-

renol, as both drugs are direct cardiac stimulants and their combined effects may induce serious arrhythmia. If desired they may, however, be alternated, provided an interval of at least four hours has elapsed. Isoproterenol should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes, or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

During the course of 20 years of use of Isuprel there has been no clinical evidence of teratogenic effects. However, use of any drug in pregnancy, lactation, or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother or child.

Adverse Reactions: The mist from the Isuprel Mistometer contains alcohol but is generally very well tolerated. An occasional patient may experience some transient throat irritation which has been attributed to the alcohol content.

Tachycardia, palpitation, nervousness, nausea, and vomiting may occur from overdosage, especially when the sublingual tablets are used. Rarely, do headache, flushing of

the skin, tremor, dizziness, weakness, sweating, precordial distress, or anginal-type pain occur. The inhalation route is usually accompanied by a minimum of side effects. These untoward reactions disappear quickly and do not, as a rule, inconvenience the patient to the extent that the drug must be discontinued. No cumulative effects have been reported.

Dosage and Administration: Bronchial Asthma: Mistometer—Holding the Mistometer in an inverted position, a single deep inhalation generally will afford control of an acute attack; a full minute should be allowed to elapse in order to determine this effect before a second inhalation is considered. Try to hold breath for a few seconds before exhaling. Occasionally a second inhalation may be necessary.

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been appointed by Secretary Finch. The original assignment of this Task Force was to look into ways to improve the activities of Medicaid. The Task Force is assigned to investigate the feasibility of comprehensive health insurance.

Mr. Layton reported that AMPAC contributions are high and have exceeded all expectations; on the other hand he pointed out that HAMPAC contributions are down 22.5%.

Mr. Layton further reported that the AMA has a very progressive program and will be proposing legislation for the first time. Some of the draft bills completed and approved by the AMA Council on Legislative Activities and Board of Trustees were outlined.

Auditor's Report: The President recommended that each Councilor review and study the Auditor's Report which was circulated the day of the meeting since the report was not ready for distribution before the meeting.

ADJOURNMENT:

The meeting adjourned at 4:15 p.m. ■

R. VARIAN SLOAN, M.D., *Secretary*

Book Reviews continued from 147

the reproductions is excellent. The description of the various diseases and disorders of the spine is concise and readily assimilated. Numerous references are available at the end of each subject discussed. The book is well indexed and the table of contents enables quick reference to any particular aspect in question. This volume is a valuable addition to any library and is particularly recommended to radiologists.

PHILLIP S. ARTHUR, M.D.

Obstetric Forceps

By Leonard E. Laufe, M.D., F.A.C.O.G., Assisted by Raymond J. Cristina, M.Litt., 141 pp., \$8.50, Hoeber Medical Division, Harper & Row, Publishers, 1968.

THIS SHORT BOOK is well illustrated in black and white, and written by a man who has a long-time interest in this field. The subject matter is well divided and indexed and begins with the evolution and anatomy of obstetrical forceps. The physics of forceps extraction is well handled.

Forceps are discussed in general and in specific, with particular attention to making the instrument fit the problem at hand. Dr. Laufe has had a particular interest in designing forceps and makes a very convincing argument for using those built as a third-class lever to reduce compression on the fetal head. The illustrations are clear. The book is very readable.

This book is recommended to any who are particularly interested in reviewing the use of obstetrical forceps.

C. C. MCCORRISTON, M.D.

Current Therapy 1969

Edited by Howard F. Conn, M.D., 945 pp., \$15.00, W. B. Saunders Company, 1969.

CURRENT THERAPY 1969 follows its usual format of past years. It is excellent as a quick source of information, provided one's diagnosis is correct. It tends, like all multi-authored texts, to be spotty. Alternative treatment programs are often neglected.

Finally, it has lost its luster of former years, when practical hints for treatment of the commonplace made this volume a jewel. ■

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Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: Central Nervous System—

Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. **Autonomic Nervous System—**Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. **Endocrine System—**Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. **Skin—**Dermatitis and skin eruptions of the urticarial type, photosensitivity. **Cardiovascular System—**Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. **Other—**A single case described as parotid swelling.



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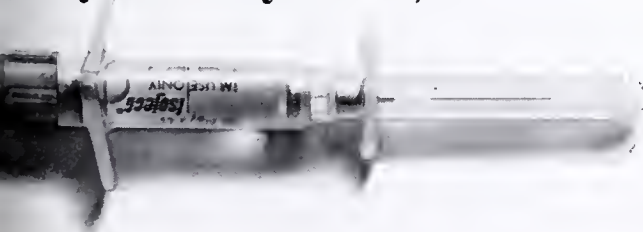
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Fire victim. Examination reveals second degree burn of lower leg. To combat shock, restore circulatory volume and replace protein loss, plasma is administered. Local pressure dressing applied. Limb elevated to limit the flow of lymph. About 36 hours after admission the patient develops an elevated temperature and complains of pain at the site of the lesion. Dressing removed. A suppurating slough area has developed over part of the burn. A swab specimen is taken for culture and the slough area is debrided. Antibacterial treatment is begun with Terramycin I.M. Days later, recovery is progressing, and the laboratory report shows a mixed infection with a predominance of susceptible coliform bacteria, confirming the therapeutic choice. Terramycin therapy is continued until all signs of infection disappear.

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Contraindicated: In individuals hypersensitive to any of the components of this drug.

Warnings: If renal impairment exists, even usual doses may lead to excessive systemic accumulation and possible liver toxicity. In such patients, lower than usual doses are indicated and for prolonged therapy oxytetracycline serum level determinations may be advisable.

Terramycin may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Use of oxytetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of teeth. This effect occurs mostly during long-term use of the drug, but it has also been observed in usual short-treatment courses.

During treatment with tetracyclines, individuals susceptible to photodynamic reactions should avoid direct sunlight. Discontinue therapy at first evidence of skin discomfort.

Note: With oxytetracycline, phototoxicity is not believed to occur and photoallergy is very rare.

Precautions: Use of broad-spectrum antibiotics occasionally may result in overgrowth of nonsusceptible organisms. Where such infections occur, discontinue oxytetracycline and institute specific therapy.

As with all intramuscular preparations, Terramycin Intramuscular Solution should be injected well within the body of a relatively large muscle. **Adults:** The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus), or the mid-lateral thigh.

Children: It is recommended that intramuscular injections be given preferably in the mid-lateral muscles of the thigh. In infants and small children the periphery of the upper outer quadrant of the gluteal region should be used only when necessary, such as in burn patients, in order to minimize the possibility of damage to the sciatic nerve.

The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Increased intracranial pressure with bulging fontanelles has been observed occasionally in infants receiving therapeutic doses of the drug, but such signs and symptoms have disappeared rapidly on cessation of treatment with no sequelae.

Adverse Reactions: Subcutaneous and fat-layer injection may produce mild pain and induration which may be relieved by an ice pack. Very mild gastrointestinal disturbances, not requiring discontinuance of the drug, may occur occasionally. Allergic reactions, including anaphylaxis, rarely have been observed.

Dosage: **Adult:** The optimal dosage varies, depending on the type and severity of infection. Unless otherwise specified, a dose of 100 mg. every 8 to 12 hours, or a single daily dose of 250 mg. should be adequate for the treatment of most mild or moderately severe infections. In severe infections, 100 mg. every 6 to 8 hours, or 250 mg. every 12 hours may be necessary.

Serum levels obtained by the recommended dosages are comparable to those provided by the oral dosage of 1 to 2 Gm. daily in adults. Antibiotic therapy should be continued for at least 24 to 48 hours after all symptoms and fever have subsided.

In certain diseases specific courses of therapy may be recommended as a general guide. In primary and secondary syphilis for example, the daily administration of 2 Gm. oxytetracycline, orally, in divided doses for two weeks has given good results. In cases of gonococcal infection two intramuscular injections of 250 mg. each, or one intramuscular injection of 250 mg. combined with one gram given orally as a single dose, will usually suffice, but repetition of this therapy will be required in an occasional case.

In the treatment of hemolytic streptococcal infections, therapy should continue for at least 10 days to prevent development of rheumatic fever or glomerulonephritis. In the treatment of staphylococcal infections indicated surgical procedures should be carried out in all cases.

Pediatric: A dosage of 3 mg./lb./day in two doses has been found satisfactory in the treatment of most mild to moderately severe infections. For more severe infections, higher dosages may be indicated and should be adjusted accordingly.

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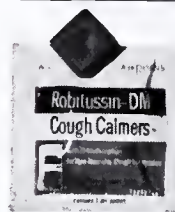
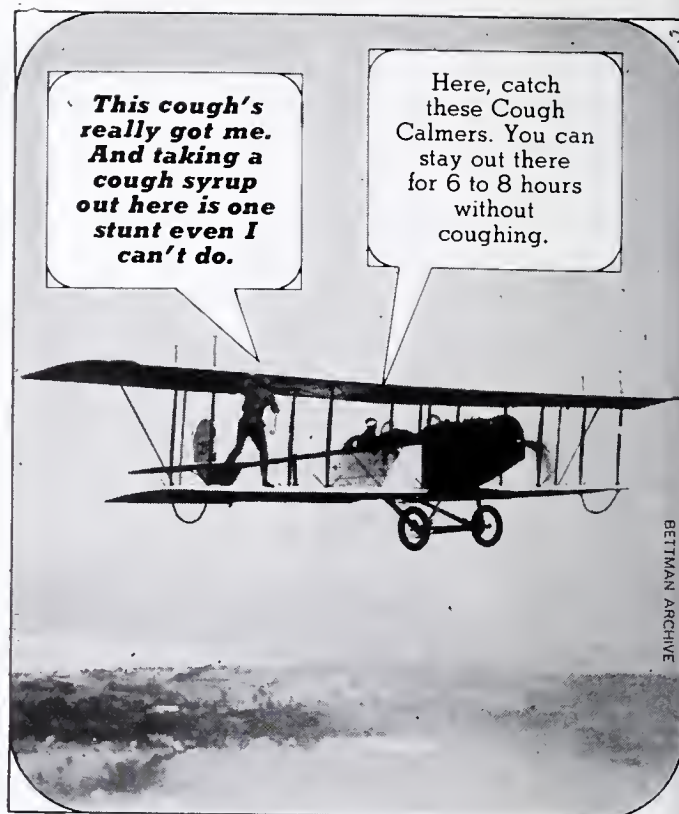
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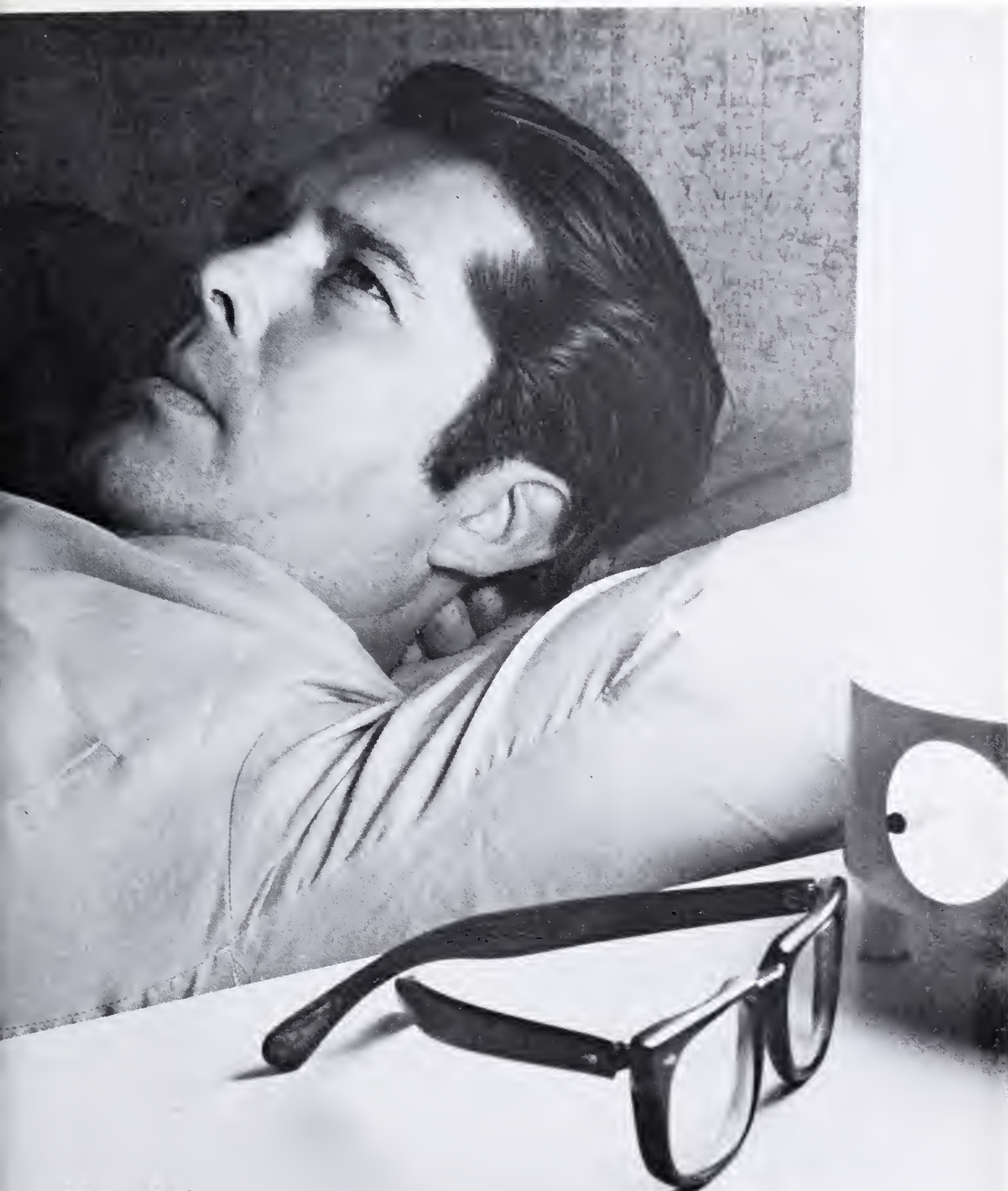
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Up to 80% recurrence of bacteriuria: a need for long-term suppressive therapy?

You can readily clear the urine of bacteria and control the acute phase of urinary infection with specific antibacterial therapy. But is that enough? Continuing reports on the high rates of recurrence (80% in some cases¹⁻³) suggest that it is not.

A growing number of clinicians now feel that immediately after the control of the acute phase in patients with a history of recurrence, long-term suppression of bacteriuria should be considered and may provide a greater measure of success.

Many clinicians have found Mandelamine helpful in preventing recurrences and fulfilling the need of long-term suppressive therapy.

Mandelamine reduced recurrences in adult males³

The interim results of a continuing study in seven U. S. Public Health Service hospitals demonstrate that long-term treatment with urine sterilizing agents can control recurrence of bacteriuria in adult males.

However, long-term therapy was only effective if initial sterilization of the urine was achieved with broad-spectrum antibiotic therapy.

In this study such antibiotic therapy eradicated bacteriuria in 88 percent of 122 patients. Then each of these 107 patients was placed randomly in one of four groups. After 13 months the recurrence of bacteriuria rates was 86% for the placebo group, 46% for the nitrofurantoin group, 43% for the sulfamethizole group and 22% for the methenamine mandelate (Mandelamine) group*.

In this group, the greater interim use of antibiotics for incidental infections, and minor variations in distribution of patients as to adverse host factors, may have contributed to the better response.

Mandelamine has also been shown to reduce recurrences in children⁴ and to be of value in the treatment of bacteriuria associated with chronic infections.⁵

Mandelamine— a logical choice

There has been increasing interest in the use of long-term suppressive therapy, although the benefits are not yet fully established. In each case, the physician must decide, based on the history of recurrences, whether he wishes to institute long-term bacteriuria control.

When the decision is made to utilize such therapy, Mandelamine is a logical choice.

When utilized immediately after antibiotic therapy, Mandelamine, in conjunction with a urinary acidifier (if necessary) is a useful agent in preventing recurrences of bacteriuria. Through its local action in the urine, Mandelamine exerts its antibacterial effect against a wide range of gram-negative and gram-positive pathogens. Unlike sulfonamides and antibiotics, it does not foster development of bacterial resistance. And Mandelamine offers the safety margin and economy so important in long-term use.

Q.i.d. dosage

Since the methenamine class of drugs is rapidly excreted, a *q.i.d.* dosage of Mandelamine is recommended for a more continuous level of the antibacterial agent in the urine.

1. *Mod. Med.*, 34:109 (April 11) 1966. 2. *The Kidney*, ed. 3, Boston, Little, Brown & Co., 1967, pp. 286-291. 3. *Ann. Int. Med.* 69:655 (Oct.) 1968. 4. *Am. J. Dis. Child.* 105:560 (June) 1963. 5. *Hosp. Med.* 4:73 (May) 1968.

Description: Mandelamine (methenamine mandelate), a urinary antibacterial agent, is the chemical combination of mandelic acid with methenamine.

Indications: Mandelamine (methenamine mandelate) is indicated for the suppression or elimination of bacteriuria associated with pyelonephritis, cystitis and other chronic urinary tract infections; also for infected residual urine sometimes accompanying neurologic diseases. When used as recommended, Mandelamine (methenamine mandelate) is particularly suitable for long-term therapy because of its safety and because resistance to the nonspecific bactericidal action of formaldehyde does not develop. Pathogens resistant to other antibacterial agents may respond to Mandelamine (methenamine mandelate) because of the nonspecific bactericidal effect of formaldehyde formed in an acid urine.

Contraindication: Contraindicated in renal insufficiency.

Precautions: Dysuria may occur (usually at higher than recommended dosage). This can be controlled by reducing the dosage and/or acidification.

When urine acidification is contraindicated or unattainable (as with some urea-splitting bacteria), the drug is not recommended.

Adverse Reactions: An occasional patient may experience gastrointestinal disturbance or a generalized skin rash.

Dosage and Management: The average adult dose is 4 grams daily given as 1.0 Gm. after each meal and at bedtime. Children 6 to 12 should receive half the adult dose and children 5 years of age or under should receive 250 mg. per 30 lb. body weight, four times daily. Since an acid urine is essential for antibacterial activity with maximum efficacy occurring at pH 5.5 or below, restriction of alkalizing foods and medication is thus desirable. If testing of urine pH reveals the need, supplemental acidification should be given.

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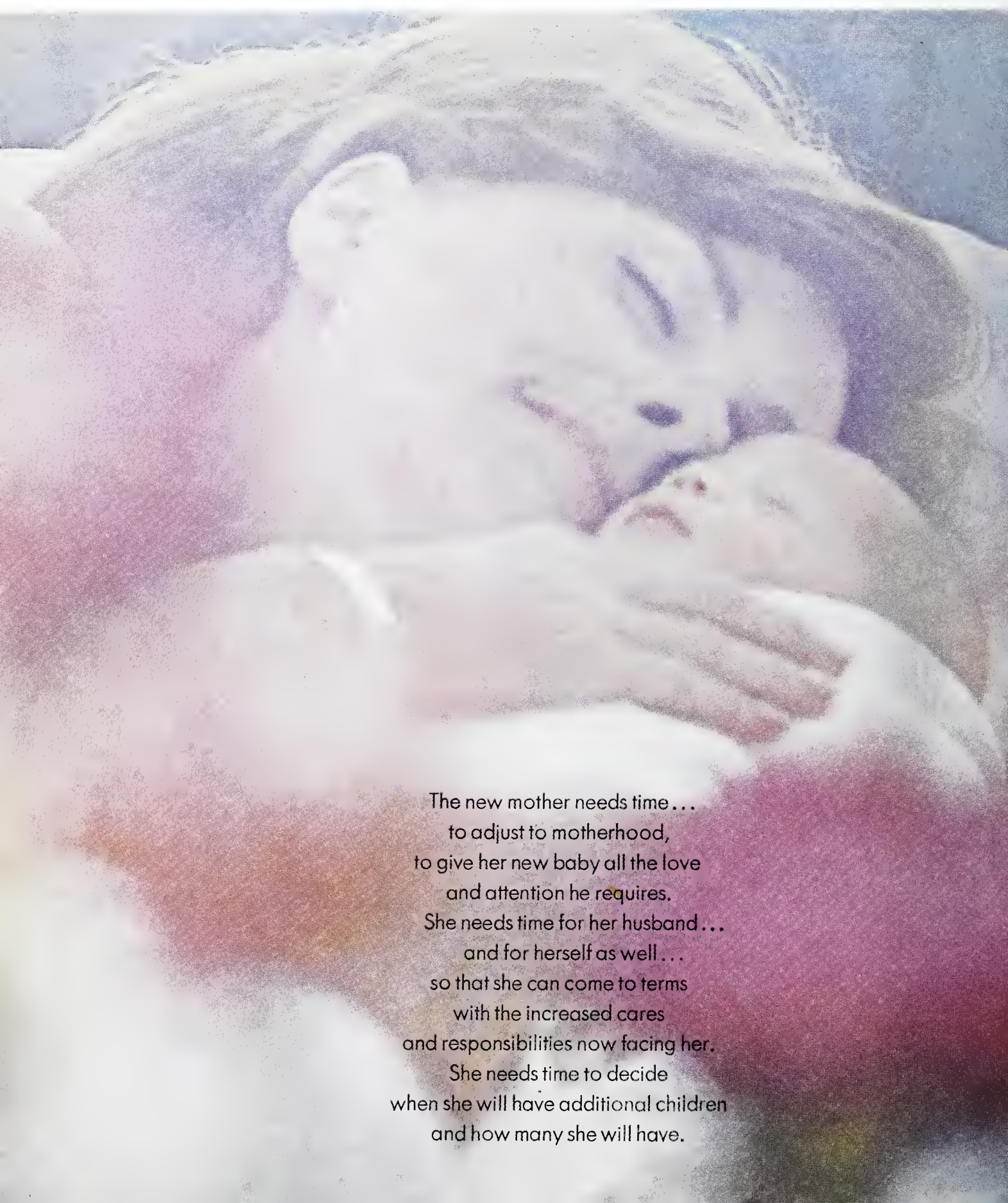
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Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral opoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968^{1,2} estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral con-

ceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Paponicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values; metyrapone test; pregnenolone determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see complete prescribing information.



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BRIEF SUMMARY

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Contraindication: *In the male*, carcinoma of the prostate, because of the methyltestosterone component.

Caution: *In the female*, for all indications, except postpartum breast engorgement, to avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period). *In the male:* A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

Side Effects: In addition to withdrawal bleeding, breast tenderness, hirsutism may occur.

Indications and Suggested Dosage Regimens: Menopause (*Female*) or 2 red tablets daily. (See **CAUTION**.) Bone Disorders (Osteoporosis, Paget Disease, Nonunion and Delayed Union of Fractures in the Elderly, and as Adjunct to Prolonged Corticosteroid Therapy)—(*Male or Female*): 1 yellow tablet daily. (See **CAUTION**.)



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HAWAII MEDICAL JOURNAL

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VOLUME 29 • NUMBER 3

The girth control pill



Tepanil[®] Ten-tab[®]

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works on the appetite
not on the 'nerves'

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Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety,

and jitteriness. In contrast, CNS depression has been reported. In a few cases, an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was on isolated experience, which has been reported by others. Allergic phenomena reported include such conditions as urticaria, ecchymosis, and erythema. Gastrointestinal effects such as constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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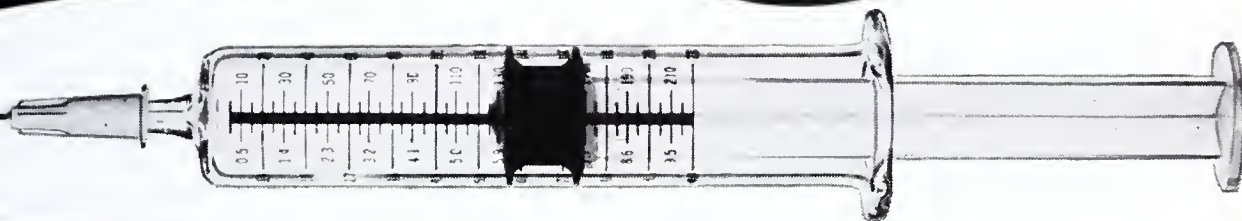
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Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.

*McClarin, W. M., and Knox, J. M.: *Cutis* 3:619 (June) 1967.

†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.


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Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.



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*Smith, D. R.: General Urology, Los Altos, California, Lange Medical Publications, 1966, p. 141.



specific control for prostatic infection **Thiosulfil® Forte** An excellent first choice
Brand of sulfamethizole 0.5 Gm.

In all cases, sensitivity of the organisms may vary. Sensitivity tests, preferably by the tube dilution method, should be done first, for guidance as to alternate therapy in case THIOSULFIL Forte (sulfamethizole) does not control the infection.

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Warning: Because of the high solubility in body fluids of sulfamethizole in its free and acetyl forms, the hazards of renal tubule obstruction are minimized. The usual precautions generally exercised with sulfonamides should, however, be observed. In those rare instances where exanthemata, urticaria, nausea, emesis, fever, hemolytic anemia, or significant hematuria are encountered, administration should be discontinued.

Suggested Dosages: Suggested range of dosage—Adults: 1 or 2 tablets (0.5 Gm.-1.0 Gm.) three or four times daily.

An initial dosage of 3 Gm./day for two weeks will usually bring the infection under control. Where longer therapy is necessary, 1 Gm./day has been successfully employed. Patients with incurable chronic infections may require only 0.5 Gm./day to remain indefinitely symptom-free.

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Contraindications: Edema, danger of cardiac decompensation; history or symptoms of peptic ulcer, renal, hepatic or cardiac damage; history of drug allergy, history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alkali formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastro-

intestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be

closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention), skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derma-

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Serious side effects can occur.
Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings and contraindications. Read the prescribing information. It's summarized below.

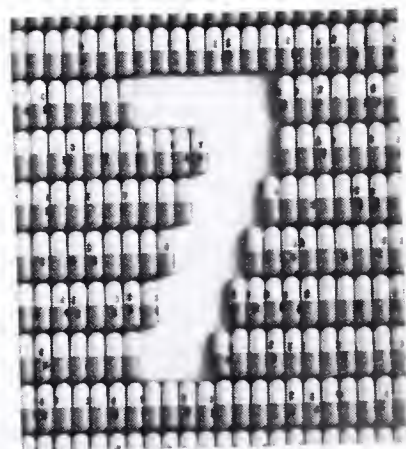
is, Stevens-Johnson syndrome, SJS, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis and, rarely, salivary gland enlargement may require cessation of treatment. Such patients should not receive subsequent courses of the drug. Vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot

be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis:
Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week.

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For complete details, please see full prescribing information.

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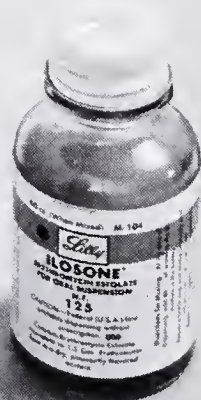
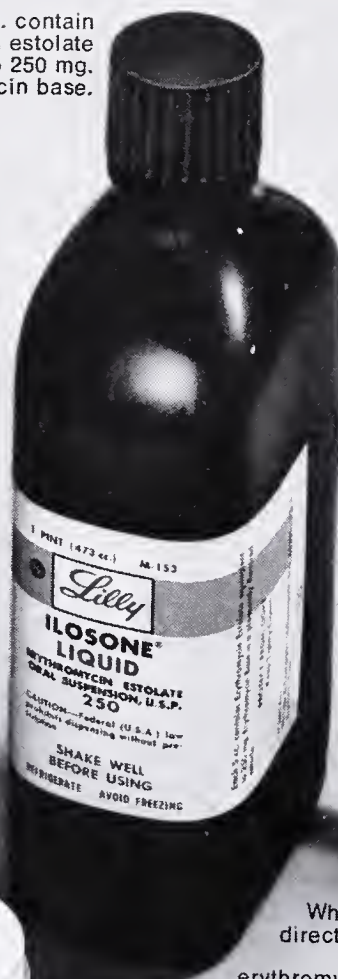
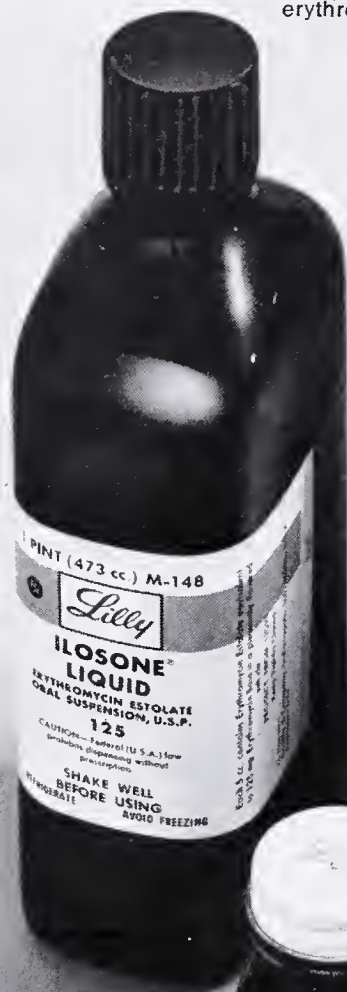
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LOFENALAC® low phenylalanine formula

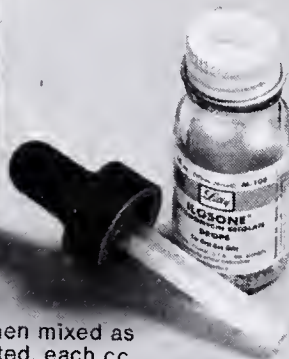


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Each 5 cc. contain
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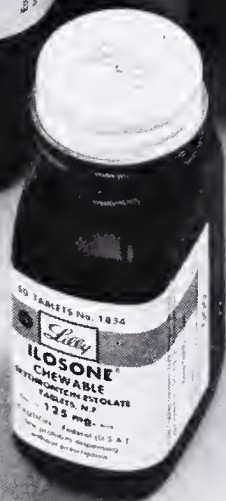


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each 5 cc. will contain erythromycin
estolate equivalent to 125 mg.
erythromycin base.



When mixed as
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will contain
erythromycin estolate
equivalent to 100 mg.
erythromycin base.

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equivalent to 125 mg.
erythromycin base.



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Residents of Hawaii, especially Japanese, are far more apt to be susceptible to rubella than mainlanders are.

Rubella Susceptibility Among Adults in Hawaii: Differences by Sex and Ethnic Group

SCOTT B. HALSTEAD, M.D.,* and ARWIN R. DIWAN, Ph.D., Honolulu

● Nearly 68 percent of 122 men but only 39 percent of 248 women had serum-hemagglutination-inhibition antibody to rubella in a titer of 1:10 or over from presumptive prior rubella infection. Persons of Hawaii birth who had spent one or more years away from the state were more apt to have evidence of past infection than were lifelong residents. Antibody prevalence in lifelong Japanese residents of Hawaii was lower than that for all other ethnic groups. Less than 32 percent of Japanese men had rubella antibody as compared with 77 percent of men of other ethnic groups of comparable age; only 21 percent of Japanese women had HI antibody compared with 50 percent of women of other groups. These data suggested that: (1) the 1965 rubella epidemic in Hawaii did not immunize a large segment of the young adult population; (2) men are more highly exposed to rubella than women; and (3) the epidemiology of rubella in Hawaii differs markedly with ethnic group, Japanese being relatively shielded from infection.

THERE IS AN Army tradition that Hawaii-born men fall ill with rubella *en masse* in recruit training camps. Documentary evidence of the high rate of rubella susceptibility among adults which this experience suggests was provided by Sever and colleagues.¹ Studying serums collected in 1964 from pregnant women, these workers found 58 percent of Oahu (and 71 percent of Hawaii) women free of neutralizing antibodies to rubella. Within one year of this study, rubella had spread to Hawaii from the mainland pandemic and resulted in 3,345 reported cases, according to K. L. Gould, M.D., of the Hawaii State Health Department.

Since rubella is notoriously under-reported, it

is difficult to estimate from these statistics what proportion of the Hawaii population was infected during the 1965 outbreak. To investigate this problem, late in 1968, we began to study rubella antibody prevalence in Hawaii. Since the susceptibility of women to rubella directly regulates the incidence of the rubella syndrome in babies, our initial interest was in the adult population. In our first study, sera from persons submitting to premarital or prenatal serology were examined for rubella hemagglutination-inhibition (HI) antibody.² In that sample, 34 percent of 190 persons bled in Oahu, 25 percent of 56 on Maui, 43 percent of 103 on Hawaii, and 50 percent of 66 on Kauai, were without detectable rubella antibody.

Because residence and ethnic group data were not available, in this paper we report results on an additional 370 young adults for whom such data were known.

MATERIALS AND METHODS

Antigen. Rubella hemagglutination (HA) antigen prepared from BHK-21 cells infected with B 127 strain of rubella virus was used in these tests.³ Antigen was purchased from Flow Laboratories.

HI test. Sera were tested by the National Communicable Disease Center procedure, which is essentially, that used for arboviruses.⁴ All tests were performed in Microtiter equipment. Both two-day-old chick and adult male goose red blood cells were used interchangeably. Nonspecific serum HA inhibitors were removed by adding serum diluted 1:5 in borate saline, pH 9.0, to an equal volume of 25 percent acid washed kaolin (diluted in borate saline, pH 9.0). Serum-kaolin mixtures were incubated at room temperature for 20 minutes with frequent shaking. Chick or goose cell agglutinins were removed by adding 0.1 ml of 50 percent red blood cell suspension to 2 ml of kaolin-treated serum, incubating for 30 minutes at 4°C. and then centrifuging.

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TABLE 1.—Susceptibility to rubella (HI antibody <1:10) by age, sex, and residence history in 370 persons. Hawaii, 1968-1969.

AGE	HAWAII BIRTH				NON-HAWAII BIRTH			
	LIFELONG RESIDENT		RESIDENT OUTSIDE STATE		U.S.		NON-U.S.	
	Men	Women	Men	Women	Men	Women	Men	Women
17-19	24/64	42/58	0/1	0/3	0/0	4/9	0/0	1/3
20-24	6/13	47/58	1/1	9/15	1/10	18/46	0/1	3/4
25-29	4/6	6/6	0/6	7/7	0/8	6/17	0/2	3/4
30-34	2/2	3/3	0/1	0/0	0/3	0/1	0/0	0/1
35+	1/1	1/1	0/0	2/4	0/1	0/2	0/2	0/0
TOTALS	37/86 (43%)	99/132 (75.0%)	1/9 (11.1%)	18/29 (62.0%)	1/22 (4.5%)	28/75 (37.3%)	0/5 (0%)	7/12 (58.3%)
	136/218 (62.3%)		19/38 (50.0%)		29/97 (29.8%)		5/17 (29.4%)	

Sera were tested at dilutions of 1:10, 1:20, and 1:40. Known rubella antibody positive and negative human sera as well as serum controls were included in each test. Two units of rubella hemagglutinin were used. Serum-antibody mixtures were incubated at 4°C. for two hours while virus-red cell incubation was at 4°C. for 90 minutes at a final pH of 6.2. Persons without detectable HI antibody in a 1:10 serum dilution are termed "rubella susceptible."

Survey sera. Sera were obtained from two sources:

(1) Students at the University of Hawaii, selected for bleeding at a visit to the Student Health Center or sampled at various residence dormitories. Sera were obtained between October, 1968, and May, 1969.

(2) Volunteers for the 15th All-Hawaii Company, U.S. Army, who were bled in April and May, 1969.

Each volunteer filled out a personal data sheet which included residence history. "Residence" was the site where the individual attended primary school. Persons of Hawaii birth who traveled outside the State for longer than one year were tabulated as "Hawaii-born, residence outside State." Ethnic group assignments were made from last name of men and maiden name of married women.

RESULTS

Distribution of rubella HI antibody in 370 adults by age, sex, and past residence is summarized in Table 1. Susceptibility rates for island-born women are extremely high through age 34. Although samples are not of equal size, residence outside the State did not alter antibody prevalence among women of Hawaii birth. Antibody prevalence in men born in Hawaii (43%) differed from that in men who resided temporarily out-

side the State (11%). Susceptibility rates were consistently higher in island-born men and women than in persons of U.S. or foreign birth of the same sex.

Antibody distributions were also calculated for 218 persons who had never left Hawaii, comparing ratios for island of residence, sex, and ethnic group. These data are in Table 2. In all residence groups, female susceptibility rates were higher than male. Differences were also noted between antibody prevalence in Japanese and members of other ethnic groups. Japanese men and women had significantly higher susceptibility ratios ($p<.001$, $p<.01$, respectively) than did men or women of other ethnic groups.

DISCUSSION

The data presented in this paper plus those reported earlier² suggest three conclusions about the epidemiology of rubella in Hawaii: (1) the 1965 rubella epidemic did *not* immunize a large segment of the young adult population, since a majority of persons aged 17-35 are still without antibody to rubella; (2) men are more highly exposed to rubella than women; and (3) differences were observed in transmission of rubella in different ethnic groups in Hawaii.

The latter two conclusions require additional comment. Sex differences were evident in each group analyzed in the present study, although less so between Hawaii-born Japanese men and women who never left the State. When antibody distributions for all categories were cumulated, 39 of 122 men did *not* have antibody (31.9%) as compared to 152 of 248 women (61.0%). In our survey of premarital sera from Hawaii,² 16 of 57 men did not have antibody (28.1%) as compared with 138 of 358 (38.8%) women. Differences in each of the two series were significant, $p<.001$.

TABLE 2.—Susceptibility to rubella in 218 lifetime residents of Hawaii by ethnic group, sex and island of residence.* 1969.

ETHNIC GROUP	KAUAI		OAHU		MAUI		HAWAII		TOTALS	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Japanese	6/9	7/13	9/14	53/61	3/4	10/14	8/11	19/24	26/38 (68.4%)	89/112 (79.4%)
Chinese	1/2	0/1	1/3	3/4	0	0	0	1/1	2/5	4/6
Hawaiian	0/3	0/0	0/0	0/0	1/7		0/1		1/11	11/48
Caucasian	0/2	0/0	1/3	1/5	1/3	1/1	0/1		2/9	22.9%
Other	2/11	0/1	1/1	3/6	1/4		2/7	1/1	6/23	4/8
TOTALS	9/27 (33.3%)	7/15 (46.6%)	12/21 (57.1%)	60/76 (78.9%)	6/18 (33.3%)	11/15 (73.3%)	10/20 (50%)	21/26 (80.76%)	37/86 (43.0%)	99/132 (75.0%)

* Site of attendance of primary school.

Further analysis of data suggests some reasons for the observed differences. Part of the higher incidence of rubella infection in men is undoubtedly the result of infections acquired outside the State. This phenomenon may also explain the higher rate of past rubella infection in mainland men than in mainland women. Male aggregation in military or college dormitories may subject men to a relatively high risk of rubella infection. As a supplementary hypothesis, is it possible that rubella is transmitted among teenagers in a cycle involving relatively few infected females with spread to a larger group of male contacts? Nothing is yet known of the age at which sex differences in prevalence of rubella antibody occur. Until these data are acquired, additional speculation is of little value.

In our previous study,² we showed that 52 of 91 women of Japanese ancestry were susceptible to rubella (57.1%) as compared with only 9 of 23 Chinese (39.1%), 50 of 165 Caucasian (30.3%), 13 of 49 Hawaiian (26.5%), and 31 of 87 of other ethnic groups (35.6%). There clearly appeared to be two levels of transmission of rubella, Japanese being in a group by themselves. Data from the present study confirm and extend these observations. Japanese have a lower rate of past rubella infection than Hawaiian, part-Hawaiian, or Caucasian lifelong State residents. Why Japanese should be shielded from rubella is a matter of considerable interest. Differences in socioeconomic status or sociosexual behavior have been implicated in transmission rates of enteric pathogens or venereal diseases. Evidence of similar nature for infectious disease spread by the respiratory route is not so well documented.

It is of interest that rubella susceptibility rates in Japan are higher than reported in most other industrialized communities.⁵ Can it be that the same epidemiologic factors operate both in Japan and Hawaii?

Consideration should be given to the health implications of high rate of susceptibility of adults to rubella in Hawaii, particularly since a vaccine for inducing artificial immunity is now available.

Statistics for 1940-1968 from the State Health Department indicate that rubella has been reported each year and that there is a pattern of higher occurrence at four-year intervals. These data suggest that rubella is either endemic in, or frequently introduced into, Hawaii. With large numbers of immigrants and a sizable migrant military population, it would be surprising if rubella were *not* introduced into Hawaii frequently. Why introduction of rubella into a susceptible population does not result in large epidemics which immunize a majority of the population is a pertinent question, and one which cannot be answered at present.

Low-level, recurrent rubella in a population in which a majority of childbearing women are susceptible is the most dangerous epidemiologic situation imaginable for the production of congenital rubella defects. Low-level rubella, unheralded by the publicity attending an epidemic, can be expected to result in a lower than epidemic level of patient and physician recognition of maternal infection, and consequently in fewer therapeutic abortions and more live births of rubella-syndrome babies.

In view of the severe emotional impact of congenital defects on parent and child and the

high cost of rehabilitating children with multiple rubella-induced defects, every effort should be made to reduce the risk of maternal rubella infection in Hawaii. As recommended by the U.S. Public Health Service Advisory Committee, the primary effort should be directed toward interrupting rubella transmission by vaccinating the largest source of susceptibles, young children.⁶ Under appropriate circumstances and, in particular, if an outbreak threatens, direct immunization of adult women who are on pregnancy control regimens may also be contemplated.

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COOPER HOSPITAL QUIZ

- (1) The most useful test in predicting a fatal outcome in hepatitis after exposure to halothane is:
 - (a) SGOT & SGPT.
 - (b) one-stage prothrombin time.
 - (c) bilirubin.
 - (d) alkaline phosphatase.
 - (c) white cell count.
- (2) A biochemical defect resembling vitamin D deficiency or vitamin D resistance is present early in chronic renal failure. TRUE or FALSE
- (3) Improvement in renal function (or dialysis) will cause transient hypocalcemia. TRUE or FALSE
- (4) Pernicious anemia can be defined as vitamin B₁₂ malabsorption due to inadequate secretion of intrinsic factor secondary to gastric atrophy. TRUE or FALSE
- (5) These are three forms of therapy for chronic obstructive pulmonary disease: (1) antibiotics and nebulized bronchodilators, (2) intermittent positive pressure breathing and (3) breathing exercises. Which of the following is correct:
 - (a) 1 is better than 2 and 3.
 - (b) 2 is better than 1 and 3.
 - (c) 3 is better than 1 and 2.
 - (d) none is better.
- (6) If x-ray films fail to reveal pulmonary fibrosis, pulmonary function studies will be of no assistance in the diagnosis. TRUE or FALSE
- (7) Sodium fluoride may be quite beneficial in treating Paget's disease of bone. TRUE or FALSE
- (8) The EEG may be used to substantiate "cerebral death" caused by hemorrhage. TRUE or FALSE

Answers will be found beginning on page 238.

*Brand names aren't everything—but
neither should they be entirely ignored!*

Generic-Therapeutic Equivalence —Enigma or Myth?

H. C. SHIRKEY, M.D.,* *Honolulu*

● *For a variety of reasons, two different drug preparations which are chemically equivalent may not necessarily be clinically or even biologically equivalent. Differences occur not only between generic-name and brand-name preparations, but between different brand-name preparations and even between different dosage forms of the same brand-name drug.*

UNTIL RECENTLY all of us were in blissful ignorance¹ if we believed that all dosage forms of a given chemical could be uniformly expected to deliver this active ingredient to patients regardless of the dosage form (e.g. tablet, capsule, syrup, elixir), the process of manufacture, or the manufacturer.

At present, there are two divergent points of view. The proponents of one point of view stress that prescribing a drug by its generic name would invite wide variability in clinical response if many brand name products for each of many drugs were available; of the other, that there is no great problem, since less than two dozen types of drugs out of thousands have been implicated.¹⁻³ The Task Force on Prescription Drugs stated that there was gross exaggeration in the concept of a lack of clinical equivalency[†] among the chemical equivalents which meet all official standards.⁴

The Task Force may be considered as a biased

government body greatly concerned with drug costs. On the other hand, the independent, unbiased National Research Council — National Academy of Science's Drug Efficacy Study (NRC-NAC, DES) submitted the following to the Food and Drug Administration for each drug group studied after examining the data and making its recommendations for the drugs released for sale between 1938 and 1962:

Drugs of identical chemical composition (so-called generic drugs) formulated and marketed by numerous individual firms under generic or trademarked names have been evaluated for efficacy as a group without consideration of "therapeutic equivalence." In the event that no evidence for pharmacological availability or therapeutic efficacy in man can be presented for any of the indications claimed for the use of any of the drugs in the attached listing, their classifications of effectiveness may need to be modified if regulations of the Food and Drug Administration require such proof.⁵

Thus this study could not assume therapeutic, biologic, or clinical equivalence of drugs marketed by different manufacturers, even though the active ingredients are of identical chemical composition.

The disturbing fact is that really few differently produced drugs and their dosage forms have been carefully compared in human studies. Such marked degree of availability and absorption occurred in one study⁶ that when the result of this study was corroborated by the Food and Drug Administration,⁷ only the original brand of drug was permitted to remain on the market; nine other competitive brands were removed from sales. This caused Dr. Goddard to indicate that in the future, whenever a drug patent expires, generic or brand name equivalents will not be permitted on the market until they show that they possess physiologic (biologic) equivalence.⁸

Why should a chemical which is present in the official strength or amount in one or many drug dosage forms manifest differences in biologic availability? Why shouldn't chemical equivalence yield uniform biologic equivalence?

Factors which may alter the nature and the intensity of the biologic effects include: the chemical form of the drug (ester, salt, complex, etc.); the physical state, size of particles, and surface

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† Uniform terminology does not exist; however, in this paper previously published terms⁴ are utilized or modified:

Chemical Equivalents. Those drugs of multiple source which contain essentially identical amounts of the identical active ingredients, in identical dosage forms, and which meet existing physicochemical standards in the official compendia.

Biologic Equivalents. Those chemical equivalents which, when administered in the same amounts, will provide essentially the same biological or physiological availability, as measured by blood levels or by other methods.

Clinical Equivalents. Those chemical equivalents which, when administered in the same amounts, will provide essentially the same therapeutic effect as measured by the control of a symptom or a disease or its manifestation(s).

Generic Name. The established (United States Adopted Name, [U.S.A.N.]) or official (United States Pharmacopeia [U.S.P.], National Formulary [N.F.] or Homeopathic Pharmacopeia) name given to a drug or its dosage form.

Brand Name. The registered trademark name given by a manufacturer to its specific drug, product, or dosage form.

area; the absence or presence and nature of adjuvants; the dosage form (tablet, capsule, elixir, syrup, etc.) and all pharmaceutical processes used in making final dosage forms.⁹

The latter include force of compression of the tablet, and thickness and type of enteric coat. Other factors which may be of importance are pH, color, taste, stability, and presence or absence of contaminating potential allergens.¹⁰

In one tightly controlled clinical study¹¹ in adults, significant differences in blood levels and chemical effects resulted from two formulations of tablets differing only in the amount of disintegrant contained. These were produced in the same pharmaceutical house.

One cannot be absolutely sure that even an individual company's method of preparation is producing a product which consistently delivers the desired effect. For example, recently nearly 22 million coated erythromycin tablets (meeting official chemical standardization and supposedly governmental antibiotic standardization) were recalled from the market.¹² At least 100 million doses of this brand of antibiotic had previously been administered.

The United States Pharmacopeia and the National Formulary will make every effort to standardize availability, as well as requiring that drugs meet other rigid standards; however, as yet such standards cannot be prescribed for dosage forms of all drugs.

The Federal government, in its procurement of drugs, purchases some 86% of its drugs by brand names.⁶ Further, only certain producers are permitted to bid because of past experience with many producers or knowledge of their facilities for production or quality control. Purchases are largely for the armed services, Federal hospitals, or dependents. In such situations, a feedback system exists in which the prescriber can have his complaints heard by the purchasing agent who, as mentioned, does not buy drugs across the board from any producer, as might be suggested for other governmental programs using the proposed Federal formulary or compendium. This feedback system does not exist for private practitioners or for most hospitals.

What then are the individual practitioners and the Pharmacy and Therapeutic Committees and purchasing agents of hospitals to do? Experience (without real data) has allowed them to prescribe, purchase, or specify drugs generically in many instances: e.g. phenobarbital, aspirin, and antibiotics (see erythromycin above). Yet, some clinical impressions have indicated that switching from one brand name to another may result in a change in clinical response. Data⁶ have supported such impressions.

We cannot assume (in the absence of facts)

that all "identical" drugs in the market place are equal in their availability to the patient.

At this point in time we need many more data in humans to ensure that biologic and therapeutic equivalence are to be expected even when different brands (and even different dosage forms of the same brand) are chemically equivalent.

For new drugs released for sale, it is likely that we may expect such data.⁸ But, what can we expect for the many drugs already on the market? Perhaps there may be adequate clinical situations for reassessing some of these drugs for adult use. Probably not.¹¹ The opportunities for guaranteeing uniform efficacy for infants and children are markedly less than for adults.

Physicians who prescribe for infants and children, and, indeed, the young themselves, may be denied such guarantees; or because of lack of adequate facilities for their testing, the drugs may be denied use in infants and children, thus furthering an already deplorable situation—"Therapeutic Orphans."¹³

Until such time as biologic, chemical, and other standards plus the adequate enforcement of these are guaranteed for all chemicals and their dosage forms, physicians must carry on much as they have in the past. Once a patient is evaluated to be satisfactorily maintained on a brand name drug (or a generic drug of one manufacturer), it would seem unwise to switch to the drug preparation of another manufacturer.

Much greater rigidity in standardization and in product preparation will be required before physicians can be assured that all dosage forms of all drugs can be expected to give uniform biologic availability, and even if they did, because of normal patient variability, the individual patient should be monitored for the response to the therapy prescribed for the disease affecting his particular body.¹⁴

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New Programs

The Lani Booth Pediatric Pulmonary Center And Regional Pediatric Pulmonary Program

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HARRY C. SHIRKEY, M.D., *Honolulu*

IN OCTOBER, 1965, the 89th Congress passed Public Law 89-239. Title XIX of this law—education, research, training and demonstrations in the field of heart disease, cancer, stroke, and related diseases—held as its purposes:

(a) Through grants, to encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions and hospitals, for research and training (including continuing education) and for related demonstrations of patient care in the fields of heart disease, cancer, stroke and related diseases;

(b) To afford to the medical profession and the medical institutions of the Nation, through such cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases.

It is under "related diseases" that pediatric pulmonary programs have been established, and it is not difficult to understand how Hawaii's unique geographic location, together with its medical school and existing hospitals, qualified it as a "region" appropriate for carrying out the purpose of this title. It was indeed fortunate that the Kauaikeolani Children's Hospital Pulmonary Program was awarded \$210,852, which is to be spent on renovation, equipment, and salaries. During the first year of operation four other hospitals throughout the State—Kapiolani, Queen's, Hilo, and Kaiser—participated in the program with Children's Hospital and benefited from the allocation. A large portion of the award was spent in the creation of a Pediatric Pulmonary Center at the Kauaikeolani Children's Hospital to provide care for all pulmonary and respiratory problems of infants and children. St. Francis, Wilcox, and Wahiawa Hospitals were added during the second year, and, hopefully, all hospitals in the region will participate as the program grows.

The Regional Medical Program grant is for a period of three years and the second year allocation is for \$108,000. The third year's allocation has not been determined, but will presumably be in the same range.

Coincident with awarding of the Federal grant, the Lani Booth Trust gave the Children's Hospital

\$150,000 for its pulmonary center, thus raising the working capital to over \$360,000. The trustees of the Children's Hospital have therefore named it the Lani Booth Pediatric Pulmonary Center.

The entire program may best be conceived of as a system of participating hospitals (additional participants will be added in subsequent years) with the Children's Hospital acting as the referral center. Participating hospitals will act as observational and referring units which will treat pulmonary problems within their capabilities and interest, but will transfer patients needing more highly specialized care to the Pulmonary Center. The object is to improve care where it is given, avoiding major shifts in patient population. Treatment in the center will be at the request of the private physician, who will maintain medical jurisdiction over his patient with the help of the core staff. The pulmonary center is at his disposal for the practice of improved care.

The Lani Booth Pediatric Pulmonary Center will consist of a 1,400-square foot, self-contained, newly renovated portion of the hospital. It will be separately air-conditioned and will house an eight-incubator nursery unit, four-bed child's unit, a combination roentgen and sterile surgical procedures room, a pulmonary function laboratory, and a clean supply room. Blood gas and other laboratory equipment will be housed in the present clinical laboratories adjoining the pulmonary center.

We feel strongly that quality and progress in medicine depend largely upon people, and it is for this reason that we are seeking an able and dedicated director. He will be the guiding force behind the patient care, education, and research to be performed. Although there is some latitude regarding interest, we feel he should be a physician interested primarily in pediatric pulmonary physiology. Together with other physicians of the center's core staff, he will extend the expertise of the pulmonary program to include all areas and phases of pediatric respiratory problems. However, of primary concern to us in Hawaii will be the areas of asthma, allergy, and neonatal

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respiratory distress, including the respiratory derangements of infants with serious surgical problems.

A brief survey of the prevalence of respiratory diseases among children of Hawaii will suffice to justify concern over pulmonary problems.

Asthma is the most frequent chronic condition reported for Oahu children.¹ In 1964 it affected more than 35,000 persons under the age of 25², which makes its incidence here higher than on the mainland.³ Approximately 250 admissions to the Children's Hospital yearly are for severe asthma, and five percent of these are transferred from the neighbor islands for more intensive therapy.⁴ This disease accounted for 137,000 bed-disability-days in one year in Oahu school children and is not an infrequent cause of death.⁵

Hawaii's infant mortality rate of 16.9 per 1,000 live births in 1967⁶ is slightly higher than the national average of 16.2 per 1,000 live births and is much higher than the mortality rate of such countries as Sweden (12.6), Netherlands (13.4), and Japan (15.0).⁷ The United States' average of 16.2 places it 15th among the nations of the world. With Hawaii's 15,000 live births per year and the quoted mortality rate, there would be more than 250 infant deaths a year. All of these would be candidates for special care, since respiratory problems are by far the leading cause of death in this group. There would be at least an additional 250 who survived, but would fall into the "high risk" category requiring intensive care or special observation. Thus, a potential case load of 500 infants per year is envisioned for this program.

Much of the work will be in upgrading the care of the sick child with respiratory problems throughout the State. This will take the form of nurses' training in the center and symposia for physicians, nurses, and allied health personnel. Success will lie in the effectiveness with which care can be given and new knowledge accumulated in this most modern facility for pulmonary care. It will have the capability for creating a controlled environment for the asthmatic, as well as for ventilating and monitoring the premature infant and the severe asthmatic with respiratory failure. It will be as fully staffed as any intensive care unit, by nurses specially trained for work with acute respiratory problems.

The core staff as planned will consist of a project director, two clinical directors, a nurse coordinator responsible for statewide nursing education and evaluation, an inpatient clinical instructor, about 15 staff nurses, a pulmonary laboratory technician, and an executive secretary.

The opportunities afforded us by this project are gratifying, but we are sobered by the immensity of the task in achieving the goals we have set.

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Serum IgG levels are higher in patients with thyroid disease, especially with exophthalmos. We still don't know why.

Thyroid Diseases and Immunoglobulin Levels

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● *Forty-three patients with thyroid disease, all but two undergoing treatment, were examined for immunoglobulin levels and various specific serum antibodies. Immunoglobulin G was regularly elevated above normal levels, and the elevation was greatest in those patients with exophthalmos. LATS (long acting thyroid stimulator) is suspected of being the globulin component responsible for the increase, but this remains to be proved.*

EVIDENCE IS being accumulated that long-acting thyroid stimulator (LATS) is found in the serum of patients with hyperthyroidism and is a gamma immunoglobulin, IgG¹. Whether LATS is the result or the inducer of pathologic thyroid functioning has not been clarified. Studies have been made of thyroid disorders, particularly Graves' disease, from the point of view of LATS² and also with an IgG³ frame of reference. Whether these two approaches will converge to a point where LATS can indeed be considered an immunoglobulin (IgG), or whether either LATS or IgG is a prosthetic group of the other, remains to be seen.⁴

Since there is no significant amount of information pertaining to the levels of immunoglobulin in thyroid disorders, this study was undertaken (to show that changes in immunoglobulin levels in thyroid diseases do occur).

MATERIAL AND METHODS

Serum samples were obtained from 43 patients with thyroid disease (eight men and 35 women) by venipuncture and allowed to clot at room temperature. These sera were stored at -20°C . prior to use.

The method for determination of each immunoglobulin level was a modification of simple radial immunodiffusion.⁵ Antisera specific to each class (IgG, IgA, and IgM) were prepared by immunization of rabbits with each fraction isolated at this laboratory. The purity of each fraction and antiserum was determined by immunoelectrophoresis.⁶

Molten Noble agar (Difco Laboratories, Detroit, Michigan) solution in 0.01M sodium phosphate buffer pH 7.4 was mixed with each antiserum (concentration predetermined by titration against normal human serum) and poured into 1" x 3" x 1/8" plastic trays.* After it had solidified at room temperature, six wells 2.4 mm diameter, 11 mm

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apart, were made with a sharp tubular cutter. Six microliters of each serum sample were placed in each well with a microsyringe.* The trays were placed on a level surface in a plastic chamber and kept moist. Diffusion of the test samples was allowed for four hours for IgG level and 18 hours for IgA, at room temperature. The IgM level required 24 hours at 37°C. in an incubator.

At the end of the diffusion period the diameter of the circular precipitin pattern was measured with a fine scale† and converted into mg per 100 ml concentration using a standard curve plotted according to sera of known concentrations. Standard sera for the immunoglobulin levels were provided by the Hyland Laboratories.

The reagents for the determination of rheumatoid factor (RF) and antinuclear factor (ANF) were obtained from the Hyland Laboratories. The tests were performed by the method described by the manufacturer. Protein-bound iodine was also determined.

TABLE 1.—Sex and age of patients with thyroid diseases.

AGE (Y.S.)	MALE	FEMALE	TOTAL
10-19	0	2	2
20-29	0	12	12
30-39	4	8	12
40-49	4	11	15
50-	0	2	2
TOTAL	8	35	43

RESULTS

Table 1 shows that among persons with thyroid disease in this study, women outnumbered men four to one. All the men were between 30 and 49 years of age, whereas most of the women were between 20 and 49 years old.

TABLE 2.—Classification and distribution of thyroid disease.

DIAGNOSIS	MALE	FEMALE	TOTAL
Hyperthyroidism	6	20	26
Hypothyroidism*	0	2	2
Thyroid cancer	1	1	2
Thyroiditis	1	7	8
Miscellaneous†	0	5	5
TOTAL	8	35	43

* One case is primary, another after treatment of RA1.
† Simple goiter two cases; colloid cyst one case; post operation two cases.

As shown in Table 2, a majority of the cases studied was classified as hyperthyroidism: 26 cases (6 men and 20 women). Thyroiditis accounted for eight cases (one man and seven women), hypothyroidism for two cases (both women), and

* Hamilton Company, Inc. (Whittier, California).
† Fine Scale (Los Angeles, California).

thyroid cancer, two cases (man and a woman). Miscellaneous covers two cases of simple goiter, one of colloid cyst, and two of postoperative, of unknown origin. All but two of these patients were already under treatment for varying states of hyper- or hypothyroidism (Table 3).

Immunoglobulin levels for various clinical diagnoses are shown in Table 4. Eleven cases were treated by an oral antihyperthyroid drug; nine cases by radioactive iodine (RAI), and three cases by a combination of oral drug and ¹³¹I. Immunoglobulin levels showed no significant difference between modes of treatment, nor was there a tendency for immunoglobulin levels to increase or decrease according to the duration of treatment. In two cases, Ig levels were examined at the onset of the hyperthyroidism.

TABLE 4.—Mean value of immunoglobulin levels in various type of thyroid disease.

	IgG (mg%)	IgA (mg%)	IgM (mg%)
Hyperthyroidism	1503.4	294.5	94.2
Hypothyroidism	1390.0	348.5	92.0
Thyroid cancer	1205.0	285.5	76.5
Thyroiditis	1521.0	319.1	117.1
Miscellaneous	1515.0	336.2	114.0
Normal*	1193.65	221.03	56.27
	±325.25	±70.23	±31.51

In the present study, exophthalmos developed in 13 cases (30.2%). As indicated in Table 5, patients with exophthalmos showed a high IgG level compared with patients without it. In other words, 1,633.8 mg% for IgG, 338.8 mg% for IgA, and 87.3 mg% for IgM in the patients with exophthalmos, and 1,423.7 mg% for IgG, 296.8 mg% for IgA and 104.9 mg% for IgM in those with no exophthalmos. Statistically, however, the difference is not significant.

TABLE 5.—Exophthalmos & Ig levels.

EXOPHTHALMOS	IgG (mg%)	IgA (mg%)	IgM (mg%)
Exophthalmos (30.2%)	1633.8	338.8	87.3
No exophthalmos (69.8%)	1423.7	296.8	104.9

* 1,097 individuals (ages 45-65).

The forty-three patients studied (Table 3) had hyperthyroidism (26 cases), hypothyroidism (two cases), thyroid cancer (two cases), thyroiditis (eight cases), and miscellaneous thyroid diseases (five cases). The majority of those were already under treatment, with varying states of eu-, hyper-, or hypothyroidism (Table 1). The mean value of the miscellaneous group is not significant because it contains a different type of thyroid disease.

TABLE 3.—*Summary of clinical features and therapy.*

CASE NO.	SEX	AGE	DIAGNOSIS	PBI	EXOPHTHALMOS	MODE OF THERAPY	DURATION AFTER TREATMENT
1	M	49	Hyperthyroidism	13.4	+	RAI	1m
2	M	37	Hyperthyroidism	11.0	+	Tapazole	2.8y
3	M	31	Hyperthyroidism	12.3	+	RAI	2.8y
4	M	45	Hyperthyroidism	10.3	+	Propylthiouracil RAI	3.4y
5	M	46	Hyperthyroidism	14.2	+	Tapazole RAI	2.6y
6	M	34	Hyperthyroidism	11.0	—	RAI	1m
7	F	28	Hyperthyroidism	12.4	—	Tapazole	2.7y
8	F	50	Hyperthyroidism	7.8	+	RAI	2y
9	F	27	Hyperthyroidism	11.0	—	Tapazole	3y
10	F	40	Hyperthyroidism	12.4	—	RAI Propylthiouracil	*
11	F	21	Mild Hyperthyroidism	7.2	—	Propylthiouracil	1w
12	F	27	Mild Hyperthyroidism	13.7	+	Tapazole	3.2y
13	F	28	Mild Hyperthyroidism	8	—	Propylthiouracil	3.2y
14	F	20	Mild Hyperthyroidism	11.3	—	RAI	2.5y
15	F	39	Mild Hyperthyroidism	not done	+	RAI + Subtotal Thyroidectomy	3y
16	F	22	Mild Hyperthyroidism	13.5	+	Tapazole	11m
17	F	15	Hyperthyroidism	13.0	—	Tapazole Subtotal Thyroidectomy	4y
18	F	31	Hyperthyroidism	9.3	+	Tapazole	1m
19	F	57	Hyperthyroidism	18.6	+	Tapazole	2.11y
20	F	20	Hyperthyroidism	13.4	—	RAI	2y
21	F	22	Hyperthyroidism	14.9	—	Propylthiouracil	*
22	F	26	Hyperthyroidism	12.6	—	RAI	5m
23	F	23	Hyperthyroidism	10.4	—	Subtotal Thyroidectomy	7y
24	F	43	Hyperthyroidism	8.7	—	RAI	2y
25	F	34	Hyperthyroidism	13.5	—	Tapazole	3.5y
26	F	47	Hyperthyroidism	11.8	—	RAI	*
27	F	40	Myxedema	3.3	—	Thyroid ext.	*
28	F	48	Post RAI Hypothyroidism	NT	+	Thyroid ext.	*
29	M	48	Follicular Carcinoma	NT	—	Partial Thyroidectomy	*
30	F	40	Carcinoma of Thyroid	NT	—	Total Thyroidectomy	*
31	F	21	Thyroiditis	4.0	—	Tapazole	8m
32	F	47	Acute Thyroiditis	10.2	—	Cytomel + Prednisone	0
33	F	34	Thyroiditis	10.6	—	Cytomel	2y1m
34	F	49	Chronic Thyroiditis	3.5	—	Thyroid ext.	6y
35	F	36	Thyroiditis	6.9	—	Cytomel	10m
36	F	36	Thyroiditis	7.3	—	Cytomel	*
37	F	41	Thyroiditis	10.0	—	Cytomel + Steroid	*
38	M	31	Thyroiditis	8.5	—	Thyroid ext.	1.5y
39	F	35	Nontoxic Goiter	6.8	—	Thyroid ext.	2m
40	F	35	Colloid Cyst of Isthmus of Thyroid		—	Thyroid ext.	2y
41	F	41	Nontoxic Goiter	8.3	—	Thyroid ext.	1.8y
42	F	16	Status Postthyroidectomy	5.3	—	NTr.	*
43	F	42	Postsurgical Hypothyroidism	3.0	—	Thyroid ext.	*

* Duration unknown.

The TA test for antithyroglobulin was positive in 21 cases (48.8%). The rheumatoid factor (RF) and the antinuclear factor (ANF) tests were each positive in 12 cases (27.9%) (Table 6).

TABLE 6.—Levels of thyroid antibody rheumatoid factor and antinuclear factor in various thyroid diseases, and mean Ig levels.

	TEST	IgG (mg%)	IgA (mg%)	IgM (mg%)
TA	Positive (48.8%)	1413.1	292.3	101.9
	Negative (51.2%)	1557.9	327.3	97.3
RF	Positive (27.9%)	1474.6	324.8	104.1
	Negative (72.1%)	1492.1	302.7	97.8
ANF	Positive (27.9%)	1571.3	274.9	97.8
	Negative (72.1%)	1454.7	323.8	100.3

Blood types (Table 7) showed no relationship with thyroid status.

TABLE 7.—Distribution of the ABO blood groups in thyroid disease.

	O	A	B	AB
Hyperthyroidism	10	11	5	0
Hypothyroidism	1	1	0	0
Thyroid Cancer	0	1	1	0
Thyroiditis	4	3	0	1
Miscellaneous	1	3	1	0
TOTAL	16	19	7	1

TABLE 8.—PBI & immunoglobulin levels.

PBI (MG/DL)	IgG (mg%)	IgA (mg%)	IgM (mg%)
4-8 (13 cases)	1506.2	295.5	105.9
9-10 (6 cases)	1381.7	337.2	111.3
11-12 (9 cases)	1498.9	302.8	96.0
>12 (9 cases)	1498.3	282.8	91.3

The level of protein-bound iodine (PBI) was determined in 37 cases. Most of the patients (24 cases) showed more than 9 mg/100 ml, although the remainder (13 cases) were within normal limits (4-9 mg/100 ml). No significant correlation between the levels of PBI and immunoglobulin was found (Table 8). The values of PBI used in this analysis were present at the onset of the thyroid disease.

As described above, most of the patients studied were under treatment. Table 9 showed the relationship between immunoglobulin and duration of treatment.

ACKNOWLEDGMENTS

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TABLE 9.—Treatment of hyperthyroidism & immunoglobulin levels.

DURATION OF TREATMENT (YEAR)	ORAL DRUG* (11 cases)			¹³¹ I (9 cases)			COMBINATION OF ¹³¹ I & ORAL DRUGS (3 cases)			NO TREATMENT (2 cases)		
	IgG (mg%)	IgA (mg%)	IgM (mg%)	IgG (mg%)	IgA (mg%)	IgM (mg%)	IgG (mg%)	IgA (mg%)	IgM (mg%)	IgG (mg%)	IgA (mg%)	IgM (mg%)
<1	1508.3	288.5	78.7	1272.5	276.5	91.3	—	—	—	1157.5	210.5	97.0
1-2	—	—	—	1575	312	101	1600	249	56			
2-3	1483.3	370	88	1656.7	250	102.7	1975	392	84			
3<	1600	300.6	96.4	1975	274	126	1750	392	81			

* Propylthiouracil or Metimazol.

*Here is what 425 Hawaii doctors thought
about our abortion law as of September, 1969.*

Physicians' Attitudes on the Abortion Law

Report of Survey, 1969

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THE HAWAII Medical Association's House of Delegates adopted during its annual meeting in May, 1967, the specific recommendations regarding therapeutic abortion promulgated by the American Law Institute in its Model Penal Code of 1962. Subsequent to this action of the Hawaii Medical Association, the Hawaii State Legislature seriously considered many bills to change the archaic 1869 law of Hawaii, which allowed abortion only to save the life of the mother. During its 1969 session the House of Representatives passed House Bill No. 61 which contained the provisions recommended by the American Law Institute's Model Penal Code. The bill was then considered by the Senate's Public Health, Welfare and Housing Committee. Because this committee thought repeal might be preferable to merely liberalizing the abortion law, as proposed by House Bill No. 61, the bill was not reported out.

One of the questions the committee chairman and other legislators had was the current opinion of the medical profession regarding this issue. This was considered important since physicians assume the responsibility for the management of these women. The question is whether the physicians want to assume the added responsibility implied in revision of the abortion law. In order to help resolve this dilemma, a questionnaire was sent to all the members of the Hawaii Medical Association. The purpose of this report is to present the findings of this survey and to attempt to interpret the data in the light of recent developments in the abortion controversy.

THE QUESTIONNAIRE

Questionnaires were mailed on September 9, 1969, to all active and inactive members of the Hawaii Medical Association. Data were derived from the returned questionnaires received during the first six weeks after the mailing.

Respondents were given options about reporting details which they either could not recall or would prefer not to divulge. Therefore the number of responses or number of women on which the analysis is based varies, depending on category and item.

RESULTS

Out of 793 questionnaires sent out, 425 (53.6%) were returned. Distribution of responses by type of medical practice is fairly representative of the distribution within the State (Table 1).

There were 425 respondents to 793 questionnaires. Nearly 95 percent of responding physicians were in favor of some type of revision of the abortion law. Over 35 percent of respondents favored removal of abortion from the criminal code as it refers to licensed physicians: i.e., that the law be repealed and that the decision be made by the patient and her doctor. Over 22 percent favored revision of the law to allow abortion by licensed physicians under specified conditions: i.e., preservation of physical or mental health of mother, grave risk of a defective fetus, rape, or incest (American Law Institute, Model Penal Code). Nearly 33 percent favored revision as stated above, but with added controls of consultant or council. Only 4.2 percent favored no change, or more rigid enforcement of the present law. Of the obstetricians and gynecologists and psychiatrists responding, the majority favored repeal.

TABLE 1.—Distribution of responses by type of medical practice.

	RETURNED	TOTAL	PERCENTAGE
General Practice	107	219	48.8
Other (Subspecialties, Professors, & P.H.)	106	233	45.5
Surgery	60	83	72.3
Internal Medicine	49	106	46.2
Pediatrics	39	65	60.0
Obstetrics & Gynecology	35	61	57.4
Psychiatry	15	26	57.7
Unknown	14
	425	793	

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A total of 1,557 requests for abortion during the last year were reported. These requests were reported by 227 of the 425 M.D.'s responding. The range of requests reported by individual M.D.'s was from 1 to 150. The M.D.'s receiving requests by type of medical practice are shown on Table 2. Of those M.D.'s receiving requests, 102 advised against abortion while 113 referred the patients for abortions.

TABLE 2.—Percent of physicians receiving abortion requests, by type of medical practice.

	NUMBER	PERCENT
Obstetrics & Gynecology	32	91.4
Psychiatry	13	86.7
General Practice	81	74.8
Internal Medicine	30	61.2
Other	29	27.4
Surgery	17	28.3
Pediatrics	11	28.2
Unknown	5	35.7

Physicians referring patients for abortions were generally those who received the largest number of requests, while those advising against abortions were scattered through the specialties without particular pattern.

DISPOSITION

Information on disposition was reported on 985 of the 1,557 reported requests for abortion. Three hundred and eight of these were advised against abortion and 677 were referred for abortion. Of the 677 referred, 299 were referred to Japan, 70 were referred to the mainland, 117 to a physician here (who was in some instances the respondent himself), and 41 were referred to miscellaneous places such as Mexico or Puerto Rico. One hundred and fifty women were referred to a place of referral which was not revealed.

CHARACTERISTICS OF WOMEN REPORTED REQUESTING ABORTION

Of the 927 women whose marital status was reported, 557 were single, 269 were married, and 102 were either divorced or separated. Of the 903 women whose age was reported, 39 were under 15, 298 were 16-19, 439 were 20-34, and 127 were over 35 years of age. The percent of single women in each age category is shown in Table 3.

TABLE 3.—Number and ages of single women.

	NUMBER	PERCENT
Under 15	39	9.6
16-19	196	48.0
20-34	169	41.4
Over 35	4	1.0
TOTAL	408	100

Out of 482 reasons for requesting an abortion 236 (almost half) fell in the two categories of unmarried women and unwanted pregnancy (unspecified). The total list of reasons and their frequency is shown in Table 4.

TABLE 4.—Reason for request.

Unwanted pregnancy (unspecified)	120
Single	116
Economic	69
Mental	45
Multiparity	22
Divorce/separated/unstable marriage	20
Old age	14
Young age	11
Rubella	10
Parents' wish	9
Mother's health	9
Child not by husband	8
Education	7
Rape	6
Desired family size	5
Incest	3
False alarm	2
Mental retardation	1
Other	5
TOTAL	482

The distribution of religious affiliation of the 510 women seeking abortion on whom religion was reported was essentially the same as in the general population according to the 1960 census, the one exception was the Protestants, who represented 52.4 percent of the sample and represent 43.8 percent of the total female population as shown in Table 5.

TABLE 5.—Religious distribution.

	NUMBER	PERCENT	1962 SURVEY
Buddhist	71	13.9	14.0
Catholic	141	27.6	27.3
Jewish	22	4.3	1.0 (est)
Protestant	267	52.4	43.8
Other	9	1.8	7.1 (est)
TOTAL	510	100	100

The ethnic group representations differed markedly in two categories from distribution reported in the 1969 figures for women (Table 6).

TABLE 6.—Ethnic distribution.

	NUMBER	PERCENT	1960 CENSUS
Caucasian	407	50.4	27.6
Oriental	272	33.6	37.3
Hawaiian and Part-Hawaiian	89	11.0	18.5
Other	41	5.0	16.6
TOTAL	809	100	100

The categories of economic status were high, middle, and low. The breakdown was 18.7% low, 69.4% middle, and 11.9% high economic group.

In Table 7, the disposition of requests from 70 women in the high income group and 96 women in the low income group are compared. Dispositions on the other 52 women in these categories were not stated by the physicians. Of the women in the low economic group 72 percent were refused or advised against an abortion, while only 24 percent of the high income group were given this negative advice. There are a significant number of women from the high income group referred to Japan or the mainland United States for abortions. Thirty-nine women in the high income group were referred to Japan or the mainland U.S., whereas only eight women in the low income group were referred to these areas.

TABLE 7.—Economic comparison according to physician disposition.

	HIGH ECONOMIC (70)	LOW ECONOMIC (96)
Advised against or refused	17 (24%)	69 (71.2%)
Referred for abortion	52 (74.3%)	25 (26%)
Self or other doctor here	13 (18.6%)	17 (17.7%)
Japan or mainland	39 (55.7%)	8 (8.3%)
Other (nonclassifiable)	1	2

Of the women who do go to Japan for an abortion, most of the abortions obtained would be considered illegal here or on the mainland even under the revisions recommended by the Model Penal Code. Table 8 shows that only 5½ percent of conditions excluding mental health provisions, or 15 percent of conditions including mental provisions, would be covered by these revisions.

TABLE 8.—Percent of total abortion requests by conditions covered by the Model Penal Code.

Conditions	PERCENT
Rubella	2.0
Mother's health	1.9
Rape	1.0
Incest	.6
Mental retardation	.02
Mental health	9.3
	14.82

SUMMARY AND CONCLUSIONS

The survey showed that the vast majority of physicians are in favor of a change in the law regarding abortion, although there are differences of opinion on how flexible the law should be. The survey does not clearly indicate that the medical profession is in favor of repeal of the abortion law. It does indicate that the majority of

physicians are in favor of removing legal sanctions against abortion (provided that the abortions be performed in accordance with good medical standards) if continuation of the pregnancy would gravely impair the physical or mental health of the mother, if the fetus is expected to be physically or mentally defective, or if the pregnancy resulted from rape, incest, or other felonious intercourse. The majority of physicians in favor of repeal are those who are most directly involved in matters pertaining to the question of abortion: specifically, obstetricians, gynecologists, and psychiatrists. Only one-third of the responding physicians wished to add the restrictive requirement of consultation by two or more physicians.

A profile of the characteristics of a woman seeking an abortion in Hawaii depicts a single, Caucasian, Protestant woman between 16 and 34 years old. This woman is of middle income and requests the abortion for reasons of her single status, an unwanted pregnancy, or economic reasons. There are variations to this pattern, but these common features would appear repeatedly. A correlation of the disposition of requests for abortion according to economic status suggests that our present system discriminates against choices available for women from the low income group and favors the high and middle income groups.

The findings show that only five to fifteen percent of current abortion requests could be granted legally under the proposed revision of the abortion law following the pattern of the Model Penal Code. This extremely small percentage of the requests would do little to reduce the number of women who seek illegal abortions here or elsewhere.

The abortion law will need wider revisions if not complete repeal, if we want to provide women with the right to determine whether or not to bear a child and to allow physicians the right to carry out indicated medical treatment.

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Report

The Eleventh Pan-Pacific Surgical Congress

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IT STARTED back in 1929 with an attendance of 213. Alexander Hume Ford, a pseudo-scientist, a community catalyst, a sparkplug of intellect, a goateed, wizened little bachelor whose finger was in every pie, was its founder. Nils Paul Larsen, medical director at The Queen's Hospital, was the physician who caught fire from Ford's spark. My father was one of the founders. Forrest J. Pinkerton too, and he is still its Secretary General—over a period of forty years. There was an eight-year lapse during World War II, but otherwise, the Association has met every three years in Honolulu. I have been an Associate Member (as a GP) since 1953, and have attended every session since. The Eleventh Congress included 1,900 physicians from all over the world, crowding into eleven concurrent sessions plus a film forum in the course of seven mornings. There are 2,500 members from 44 countries. This session I marvelled at the number of doctors from Australia, New Zealand, England, Switzerland, France, Spain, Germany, Hong Kong, Japan, India, the Philippines, Micronesia, and South Africa.

Wednesday, October 15

I started off from home early to beat the cross-Koolau traffic and have a look at 88-year-old Mr. F. a week post-prosthesis for a hip fracture, at the hospital, before making the 7:30 breakfast session. Mr. F. had developed bleeding from his esophageal hiatal hernia from being on his back so long, and went on to have a pneumonia and even a slight stroke before another week—the week of the Congress—was up.

Despite the swelling traffic, I made good time and enjoyed the morning sunshine on Honolulu harbor, the Ala Moana, and Waikiki. The Hilton Hawaiian Village Hotel was opening its sixth floor convention complex for the Pan Pacific Surgical Congress. Other parts of the skyscraper were still in construction; the lower floors housed auto park-

ing. An outside double escalator was in constant use by participants going between the conference rooms at the convention center and the other meeting places in the Ocean Tower or the Long House, mixing in with the thousands of ordinary tourists coming and going.

Orthopedics. Congenital Dislocation of the Hip. Nickel of UCLA as moderator, Salter of Toronto, Kawamura of Japan, Griffin, and Lovell, panelists. Not an easy thing to diagnose in a newborn, yet most important to diagnose early, or lose an advantage in a hoped-for perfect rehabilitation. Feel the click of a posteriorly dislocated hip, the asymmetry of the flexed legs, the inability to abduct one or both sides to the "frog" position. Treatment: traction to obtain gradual reduction, only THEN fixation in a cast after an adductor tenotomy on the affected side, finally a nighttime or naptime splint, both in the flexed-frog position. The mal-developed acetabulum or socket ultimately reconstitutes itself, and results in adulthood can be perfect. Salter stated that casting alone without traction or tenotomy results in a 40 percent incidence of "aseptic" necrosis (avascular necrosis of the head of the femur) and permanent deformity, whereas the modern treatment gives only a 5 percent incidence of defect. Honolulu's Ivar Larsen revealed CDH occurred four times more often here in Japanese than in haoles, but rarely in Hawaiians and Filipinos. Kawamura reported 7,000 osteotomies with wedging downward of the upper lip of the acetabulum, in deformed adults, with excellent results. Somebody next to me said in a whisper: "How can anyone follow 7,000 Japanese in Japan to observe results?"

Anesthesia. By then it was two hours after a hearty breakfast buffet, and time for a coffee break. Bill Mushin of the Welsh National School of Medicine in Cardiff gave a well-spoken, clear paper on experiments in neonatal ventilation, in the jam-packed Empire Room. He showed us the simple "Cardiff Inhalator," the first few pumps of which inflate the infant lung and cannot damage

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it by over-inflating. I wished I could have said hello from a fellow Welshman, but never got close enough.

On Anesthesia Experiences with Octogenarians, Lorhan of UCLA stated a third of all surgery is on those over 65, most commonly cataracts, then prostates, hernias, gall bladders, and hips, in that order. During the first postoperative week, there is a 60 percent mortality due to cardiovascular complications; in the second postoperative week, respiratory complications cause the highest mortality, decreasing thereafter as the weeks go by. In the aged, vital lung capacity is reduced, the blood volume may drop 750 to 1,500 cc during anesthesia and surgery, the cardiac capacity drops with unfavorable effects on the kidney first, next the heart, ultimately the brain. Surgical mortality in the over-80's varies from 18 to 35% as a result. In hip fracture cases, a 24-48-hour preoperative "build-up" reduces the mortality from a 35% level to a 24% level. Preoperative stabilization is most important in the elderly. To me, as Home Physician at Pohai Nani Retirement Residence, this paper was most interesting, especially in view of three hip fractures in as many weeks recently.

Ob-Gyn. Combined Radiation and Surgery on Cancer of the Cervix. I got in on the tail end of the talk by Sherman of Detroit. Then another half-hour coffee break.

Urology. Renal Vascular Hypertension. Glenn of North Carolina warned us to be alerted to renal causes of hypertension by: (1) A sudden rise in BP, (2) a rapid acceleration of hypertension, and (3) a history of prior kidney disease. The best way to screen for it is to order minute-sequence pyelography, but for diagnosis, angiography is essential. Lars-Erik Gelin of Göteborg, Sweden, astounded everyone with his description of "workbench" surgery: he takes out an affected kidney, cools and perfuses it completely with saline, repairs the arteries or removes tumors, etc., replaces it into the waiting patient's body, and reestablishes circulation by anastomosing arteries, veins, and ureter—and it functions more often than not!

Thursday, October 16

Ob-Gyn. Conception Control. A breakfast session again, the only session this day for me. Goldfarb of Jefferson cited figures that the post-coital douche allowed a 31% pregnancy rate, the sequentials something under 5%, but the combination pill 0.1%. Evans of Detroit said that for a woman to miss her sequential was more risky than to miss a combination. He also said he was not impressed by British figures of an eight-

fold increase in mortality from thromboembolic disease in pill users in the 34-45-year age group. The IUCD is nowhere near as sure-fire as the pill, particularly if it is inserted during the three-month postpartum period. The disparate increase of T-E disease in Blood Type A women is not explained. Over-all death rate in the USA from pulmonary embolism ranks tenth at 3.1/100,000 while that from pregnancy per se ranks twelfth at 0.8/100,000. Overstreet from Oregon reported a tripling of illegitimate births in the past 25 years in the USA. Goldfarb debunked the post-pill anovulatory period, saying that this occurred primarily in women who had had similar problems before taking the pill.

Friday, October 17

Ob-Gyn. Infertility, panel headed by Robert Mackey of Sydney. This should not bother us too much, in this day and age of concern about overpopulation, but, after all, it is of particular moment to the couple who want a child, and we GP's often come across such a one. Prof. Noyes of the budding UH Med School proved to be a dynamic and excellent speaker. He suggested that the cervical mucus be examined at every visit of the wife for the presence of live sperm; that the male ejaculate, the initial ejaculate as a fractional specimen, be examined as a drop under the microscope without cover slip. If the sperm zip across too fast to be seen, the result can be classified ++++ good. The count is only as good as the counter—the laboratory—and he hopes the dilution is 0.5 ml semen to 9.5 ml saline. Radiologist Melvin Stevens of the Palo Alto Clinic produced some brilliant films using intra-peritoneal injection of nitrous oxide gas and the patient in knee-chest position, so that the contrast between gas and viscera outlines uterus, tubes, and ovaries. Thirty percent of positive findings were the *only* evidence of suspected pathology; 37% were contributory to or confirmatory of pathology; 30% showed no cause of infertility. There was a big argument with Goldfarb, who felt that culdoscopy or laparoscopy was safer and better. I leaned towards Stevens' view that his technique was easier on the patient and was more innocuous. There were some who felt that "Why laparoscopy, when a little bigger incision could provide a more open and complete look?" Noyes wound it up by stating unequivocally that there was *nothing* to be done for male infertility.

There was a mix-up after the coffee break—the main speaker on diverticulosis did not show or even send a message! Woe be to him henceforth!

General Surgery. The Dissemination of Cancer, by Warren Cole, of Chicago, was discussed by

Burdette and Richards. It reviewed the concept, but gave birth to the interesting thought in my mind that the newer concept—that if cancer cells are continuously disseminated through the blood stream but do not survive the natural immunological body mechanisms of defense, spread must occur by dint of massivity of onslaught: that this concept is biologically akin to the invasion by bacteria, or the invasion by sperm: a “take” is possible only if the invasion is a massive one, though it takes only “one” to implant. Still, the colon surgeons like to clamp off the blood supply to the to-be-resected bowel, and to resect the bowel *without* first handling the tumor mass itself. There is much yet to be learned, but the more modern approach to cancer is to avoid iatrogenic spread. Recent work in organ transplantation indicates that suppression of immunity to permit acceptance of the foreign organ results in a 15-20 percent increased incidence of later cancer. Richards of Palo Alto (Stanford) developed these concepts in the following session on cancer immunology.

General Surgery. Trauma and Shock. Richards, Altmeier, Gelin, and Glenn made up an excellent and lively panel. Here are the gems: Altmeier proposed, in septic shock, antibiotics IV, fluids, electrolytes, blood transfusion, 2-5 gm of cortisone per day, and oxygen; CVP (central venous pressure) determinations are essential to monitor; urine flow should be kept at 20-75 ml/hr. Gelin favored low-molecular-weight (below 80,000) dextran, apparently more readily available in Europe than in America, in unlimited amounts (up to 2,000 ml) and tolerated hematocrits of five to ten percent before thinking of giving blood, but said it was essential to supply adequate water before giving the expander dextran. In a severe emergency, Altmeier orders saline first, then dextran, then plasma, lastly blood, and by that time a proper cross-match should have been obtained. Glenn would not use more than one liter of dextran. All agreed that an adequate airway was essential, but Altmeier and Glenn preferred a tracheostomy over Gelin and Richards’ intubation. EKG monitoring is important too. Gelin *never* uses vasopressors any more—feels that masses of white cells in the lesser (pulmonary) circulation are embolic-occlusive; he does frequent blood gas studies, therefore. Richards related how the ecology of bacteria was changing; at one time it was the hemolytic staph, then *Pseudomonas*, then *Aerobacter*, and now *Serratia*; his choice of antibiotics IV was Colymycin—Colistin, Staphcillin—Prostaphlin.

Saturday, October 18

Plastic Surgery. This section started this day and I attended the session on primary repair of the

hand. The panel included Wm. White of Pittsburgh, the man who had twice operated on Pop’s skin cancers, once removing his index finger—the result of early days of unprotected radiation exposure, in roentgenography. There were also Verdan of Switzerland, Tubiana of Paris, and Rank of Australia, the moderator. I never realized, until I heard it here, that the innervation of the thumb, index, and medius is common (median nerve)—they “feel” alike—but the sensation between thumb and little finger is different, one to the other; therefore, it is important, in grafting, to cover soft-tissue avulsions. There is a rule in compound fractures of the fingers: tend to bony alignment and union primarily; later one can realign tendons and nerves. Another rule: never put nerves in traction. In palmar repair, rule: reconstruct arteries first, median and ulnar nerves next, deep tendons last, and ignore the superficial, in primary repairs. *Never, never* close up *per primum* grossly contaminated or badly damaged soft tissues or bones; cast them open or loosely covered.

Monday, October 20

Colon and Anorectal. Breakfast in the Long House was enjoyed *before* the panel got started on hemorrhoidal disease. The great, perennial, J. Peerman Nesselrod of Santa Barbara, the moderator, kept things lively. Salvati of New Jersey much prefers the new Barron ligator and had a series of 700 cases. Parkinson of Boise did not, but stressed the antithesis of the traditional leave-the-skin-incision-open: the Ferguson operation ties the origin of the internal pile and with a running suture closes all the way out to the peripheral end of the skin incision. The three main areas are right posterior, anterior, and left lateral. Harry Benjamin described the technique in color slides.

There was an argument about what to do with the crypts of the pectineal line between the excisions; Nesselrod is hipped on the disease being essentially a cryptitis, the hemorrhoid secondary to it, and that every crypt should be at least slashed open to expose it. Hardwicke of Portland spoke of “rectal personalities”—priceless, coming from a proctologist, with little knowledge of the other end of the patient! Nesselrod belittled the age-old teaching that hemorrhoids denote portocaval or liver disease; that the circulation from the middle hemorrhoidal arteries and veins actually serve the sigmoid and rectum, but not the anus.

Benjamin described his routine (many of us GP’s do hemorrhoidectomies): preparation includes a BE with castor oil prep, cleansing enemas, more enemas post BE and a liquid diet; postop: morphine or Demerol, oral analgesics except codeine, a general diet *after* the first 24 hrs; sulfathalidine 1 gm three to four times a day

makes the stools softer; Colace or Metamucil otherwise; Agoral as a laxative; hot sitz baths b.i.d. plus a rectal (external) cleansing douche, digitals prn only if impaction is suspected. Nesselrod said he felt insecure unless he did a daily digital; others said they preferred to be on good terms with their patients.

Nesselrod stressed the correct inference in talking of the "Whitehead Deformity" as the deformity Whitehead warned against: that would occur if the dictum were *not* followed: "Cut the skin long and the mucosa short."

Salvati felt that a posterior sphincterotomy solves the problem of both stricture and fissure as a complication. He mobilizes the anoderm under the crypts, thus cutting across under them and doing, in fact, what Nesselrod advises. Parkinson excises the stricture scar down to muscle but does no sphincterotomy. Hardwicke fears a resultant deformity if one is done. Benjamin advised leaving wounds open if there is much infection, that a chronic catgut closure of skin will not obviate the wound's opening if it needs to open.

Orthopedics. The thoracic outlet syndrome, which I feel is a better term than scalenus anticus s. or cervical rib s. or shoulder-arm s., I feel is very, very common, as does Daughtridge of Philadelphia; but Griffiths of Manchester, England, could hardly contain himself and whispered out loud: "No such entity!" Daughtridge attempted to show by angiography how the normal anatomy at the outlet for the brachial plexuses of vessels and nerves can cause compression symptoms and signs (detectable in the radial pulse) as a result of poor musculature or of overdevelopment; he said it is more common in women than men by 4:1 and in the 20's and 30's—pain, paresthesia, weakness, numbness, muscle atrophy, occasional blanching (arterial), occasional edema and swelling (venous). Adson sign: turn the head away and take a deep breath—often not in AM but in PM. Resection of the first rib alone gives a good result. Clawson of Seattle felt that operation was too radical, that muscle training was effective. To me, it is a bit incredible that the perfectly engineered human body would allow such a thing to happen in so well-worked an area, but from personal experience I feel Daughtridge may have something there. Perhaps it is disproportionate muscle use or disuse.

Orthopedics. I heard the next papers: Use of Modular Systems (Tinker Toy) in Lower Extremity Prosthetics. Quite interesting Trauma in the Growing Skeleton, apropos football and other athletic injuries. Ronald Murray of London spoke on the latter and stressed that with adequate rest and time, lesser bone injuries in a youngster will yield perfect results. Tucker of Winnipeg gave

the former. These were too interesting to forego in order to hear the Ob-Gyn panel on therapeutic abortion (I heard the very end: that in San Francisco, not even a husband could block his wife in court if she wanted an abortion nowadays!) or on iatrogenic infections in general surgery. Alas! The choices were tough to make. Many complained that PPS was becoming too big; impossible to derive full benefit from the best that is offered.

Colon and Anorectal. I gave up the Ob-Gyn panel on abortion in general in order to watch Ripstein moderate a panel on maximum diagnostic potential of the barium enema. He is the surgical dynamo from Albert Einstein Med School in N.Y. Tenner of Minneapolis started out by reciting some dicta: procto once a year—BE once every two years; one BE does not tell it all. Figiel of Detroit, a radiologist, was impressive. He is obviously a meticulous purist. First, 24-48 hours of preparation with clear liquid diet; not even milk or cream; then, castor oil; SS enemata if there has been no purging effect; he often repeats the BE the same day if unsatisfied, the first one was not good enough. Rule: it takes 2½ years for a 1-cm neoplasm or polyp to become malignant; a 10% failure in positive diagnosis by BE is "terrible." He himself has a 1½% failure incidence. In his experience, the incidence of polyp detection is 7.8% by use of high K-V + compression technique, and spot-filming the entire colon. Stevenson, a Spokane radiologist, stressed that his ilk should work closely with surgeons, gastroenterologists, and pathologists in order to be good radiologists, and that latter should be given all clinical data *prior* to the BE. A BE is not satisfactory unless: (1) cecum is clean, (2) ileocecal valve is identifiable, and (3) appendix is visualized, if there. Polyps larger than 1 cm are suspicious and must be watched for growth by x-ray; one with a "puckered" base is bad, and so is a sessile or stalkless one. Figiel stated that a routine BE in an asymptomatic person is unwarranted, impractical, and too expensive. A malignancy will double in size in six months. Persons over 65—50% have polyps. Ripstein interjected that small ones (under 1 cm) are rarely malignant. Tenner, surgeon, wants all polyps out! Ripstein posed the problem: What to do in a 35-year-old—subtotal resection vs. watch & wait? Figiel: Depends on its size—repeat BE q 6 mo x 2, q 1 yr x 2, then q 2 years. Ross, of N.Y., President of Board of American Board of Colon and Rectal Surgery, summed it up by saying: mortality from trans-colonic polypectomy is 0.6%, from complications of resection 1.8% (for benign polyps).

Thoracic- Cardiovascular. The high point of the congress: Christaan Barnard of Cape Town, South Africa, moderator of a panel on Heart Transplants and Replacements. After listening to and reading Irvine Page's (editor of *Modern Medicine*) diatribes against this man for his publicity, I was unprepared for the actual confrontation. I would use the adjectives: Young, brilliant, enthusiastic, and contagious, completely knowledgeable in his field, worthy of every bit of publicity—a doctor-scientist with the charisma that just naturally captures the attention of women, especially lay women, and reporters. The entire 1½-hour session was punctuated every minute with the flash of a camera bulb from the physician audience, the doctors' wives and other women permitted to enter the guarded doors only after we members had all been seated for breakfast, allowing them SRO at the walls, the pro photographers; even the projectionist at the slide machine doubled as a photographer. Barnard had his slack shirt out of his slack trousers, his long hair periodically jerked out from in front of his face by the acquired tic of modern long-hairs à la femme; his smile came often and was brilliant and unselfconscious. He was not unnerved by the flash bulbs. His attention was entirely on the subject. He was way ahead of the other panelists, yet courteous and inclusive of them, lavishing credit on their utterances and even if they had not "uttered" what they meant, or should have. He enraptured panelists and audience entirely. I am glad I did not miss it; I am glad I got there not late enough to lose a seat—which I nearly did!

Hallman of the Baylor team in Houston led off by listing the criteria for the recipient: under 50; no other serious disease, infection, or cancer; histocompatible; free of autoimmune disease. Barnard followed by stating a precise opinion that he felt A-I disease was *not* an important criterion, was largely undetectable anyway. Tountas of Athens, Greece, apologized first for having done only experimental work on animals, but was courteously introduced by Barnard as one who could well describe the techniques of heart transplant. Unfortunately, his diction was so poor, we missed most of what he said and had to guess from the slides. He revealed that there have been 140 heart transplants in humans in the world to date! Again Barnard followed, between panelists, to explain how important it is to perfuse the heart generously with saline prior to transplant and how important it is to provide "vents" for both ventricular and atrial chambers to bleed off the trapped air before connecting to circulation of blood on completion of attachment. Surgeon Moore of UCLA then described studies on enzyme systems, antihistamines,

Azathioprine, corticosteroids, ALS (anti-lymphocyte serum) or ALG (dog globulin) in combatting the rejection phenomenon. Barnard complimented Moore and added: pretreatment of the recipient as soon as the donor is set, with 24 hours of Azathioprine and ALS; the use of anticoagulant heparin intravenously because the IM route hurts too much. He explained that he would use the time originally ascribed to the absent Cosio-Pascal from Mexico City, to give a dissertation himself. He was innocently bubbling over with knowledge to share with one and all: that rejection was actually an inflammation; that the pathognomonic sign was a drop in QRS voltage in the EKG monitor, which could be computerized and graphed; that there were no early enzyme changes (SGOT, etc.); and, most remarkably (something I had not heard mentioned by Starzl or Good the week before at HIC) that Barnard felt the protection of the heart meant assuming "rejection" occurred once a week, i.e., constantly, and, therefore, that a once-a-week boost in prednisolone, or a big dose of it, might prevent rejection; he showed dramatically and scientifically that it did.

Hallman next described a truly remarkable prosthetic device that served during a 60-hour period between "death" of a recipient with inability to "repair" his heart surgically, and the obtaining of a donor heart. Interest was unremitting in the audience, but the time was up and I got me up enough courage to remind Barnard that he had earlier promised to show us the post-mortem slides on Blaiberg, "time permitting." We encroached upon the recess half hour but it was well worth it, because perhaps we at PPS were the first scientific audience to see these, since Blaiberg died (19 months post-transplant) just recently. Cause of death was low cardiac output, the result of an "infection" onto the 25-year-old "new" heart by Blaiberg's own severe atherosclerosis, especially of the coronary arteries. He did not have the revealing and self-protecting "angina," since, of course, the "new" heart had no nerves. Barnard admitted learning the lesson—that he should have tried harder to remedy Blaiberg's own atherosclerosis and high cholesterolemia. Boy, did I get a lot of grateful and excited looks from fellow members for having reminded Barnard! He literally jumped at the chance to show these fascinating brand new slides in beautiful color to us. He is definitely all and more than he is cracked up to be—opinionated Dr. Page notwithstanding. Definitely the high point of PPS 1969—for me at least!

Colon and Anorectal. What a comedown to go and listen to a panel on functional constipation! But it was as good as the rest! Marks of Kansas City threw pearls: a child's soilage is often a mark

of impacted stool and acquired megacolon. In the aged, atonia is often the result of drugs—diuretics, digitalis, and steroids being the commonest; pseudomelanosis of the rectal mucosa is the result of long use of cascara, etc.; mineral oil interferes with digestion and with absorption of carotene (provitamin A); proteolytic enzymes help prevent the fetid breath of constipation and poor digestion; S.S. enema is traumatic—he regrets his years-ago endorsement of the Fleet enema, and feels that a saline or water enema is all that should ever be used. Nesselrod reviewed hemorrhoidectomy; again, cryptotomy at the dentate line; he cannot get over his antipathy to the new “closed” technique. Nesselrod’s was a separate paper, as was Marks’. Next came Bacon of Philadelphia on colon polyps again.

Anesthesia. Simulator I—an artificial electronic-and-computer-controlled “patient,” 6’2”, 210 lbs., that cost \$270,000 to build—was demonstrated in slides and a color movie by Denson of UCLA. See what you can do with a Federal grant! It is used to teach resident house doctors in training how to give modern anaesthesia. The “patient” breathes; has a heart that beats variably in response to drugs given into its veins, stops beating or becomes arrhythmic on command; coughs; develops muscle fasciculations when given relaxants; vomits bile on command; prints out a complete report on what was done, at what time, and with what response. Otherwise, the instructors are fearful, in training residents on live patients, that either the resident must be taken off too soon to learn anything, or left on too long and the real patient placed in jeopardy. With Sim I, the instruction can be stopped, resumed, reversed, or repeated ad infinitum. Wow! What sophistication! Even its eyes open and close with drugs, and the pupils enlarge or constrict with appropriate levels of oxygen. So ended day 7 of PPS.

Wednesday, October 22

Neurosurgery. Breakfast for the last time—a generous helping of scrambled eggs, fried ham, a stack of assorted fresh fruit cubes, and a papaya; gallons of coffee refills. I never once fell asleep, undoubtedly due to the large intake of coffee. Imagine the collective I & O of 1,900 MD’s! Evans of Chicago was the moderator. Gurdjian (Detroit) showed interesting movies, taken at 7,000 frames per sec, of impact effects on the skull, demonstrations of contrecoup “vacuum” bubbling and negative pressure effects and damage. This panel was on intracranial trauma, incidentally. Then Olle Olsson of Lund, Sweden, demonstrated beautiful angiographs of the skull depicting subdural hematomata, etc., showing how easily they can be missed. He had to rush off to catch a plane; so

. . . wouldn’t you know? the projectionist had trouble with the automatic carousel, and inexperienced helping hands tumbled all the various speakers’ slides into a jumbled mess and each had to sort out his own! Union regulations require a union member to operate these machines in hotels and at conventions, even though they understand nothing of the material shown. Most of the time, an MD member of PPS had to sit alongside to show the featherbedding projectionist what to put on next! Anachronisms of modernity: heart transplants vs. simple slide projection problems; easier to go to the moon! Ablin of Bakersfield took a tediously long time to describe his Echo-EEG; it uses ultrasound waves to demonstrate interfaces, midlines in the skull, shifts, etc. Queen’s has one (costs \$4,000) and it’s ultimately not that definitive. McQueen of Baltimore was a panelist I did not stay to hear, because I knew the next session in anesthesia started early.

Anesthesia. Intensive Care. Familiar Mr. Mushin of Cardiff, Wales, was on this panel, which was moderated by Safar of Pittsburgh. Since our CCU at Castle was so new, I was anxious to pick up pointers. Safar stressed the “team” approach, with representatives from anesthesia, internal medicine, and surgery on a kind of committee. Volpitto of Augusta, Georgia, was against this; thought maybe an anesthesiologist could be its director, but favored any “interested” MD as director rather than having co-directors. Mushin waxed wroth and said this was all bunkum! He feels the “*aneesthetist*” should remain in the OR and stick to his art and specialty, or forever become an “executive secretary” of the CCU. He felt the CCU manager or “caretaker” should be a specialized individual such as a resident-in-training; that the “*aneesthetist*” should be of the stature of a consultant equal to an internist or surgeon or cardiologist. Denson agreed with him. I left at this point.

Ob-Gyn. Dysfunctional bleeding in Adolescent Girls. I stayed to hear Huffman of Northwestern Med School say in 15 minutes (after which I left) that out of 302 cases of uterine bleeding of an abnormal character in young women, 248 fit into the category of dysfunctional (meaning no specific cause found), 28 were due to hypothyroidism, and 14 the result of incomplete abortions, and that malignancy as a cause was extremely rare but needed to be ruled out. Good figures.

Orthopedics. I just had to hear The Organization and Work of a Major Accident and Emergency Service, at Mayday hospital in Croydon, London, by Mr. MacQueen. He showed beautifully reminding-of-our-trip-last-winter slides of London, the freeways, turnabouts, flyways, etc. It was a most interesting presentation of the results

of the 1962 Platt Report: that fully comprehensive services needed to be taken out to the people in regional centers, with attendant ambulance and emergency services in which we, in this country and particularly Hawaii, lag. "Better to go past the door of the cottage hospital" is the way he described their inadequacies of care prior to implementation of the Platt report. Our ambulances here still "take the victim to the NEAREST hospital," inadequate though it may be for definitive, life-saving treatment. He also stipulated: the actual physical presence of an adequately trained M.D. is mandatory—he can be on close call. British ambulances have high headroom, so treatment in ambulance can easily be accomplished.

I got in on the tail end of a talk by new PPS Vice-President Sim-Fook Lam of Hong Kong on his experiences at St. Elizabeth's Hospital in Kowloon with the May, 1967, Communist bombings (1,167). Commentator Calandruccio of Memphis stressed once more the incontrovertible dictum that explosion wounds should never be closed per primum.

Ob-Gyn. I ended up the 11th Pan-Pacific by listening in on a panel discussion on sex education

and came away convinced that the furor points up the inadequacies of our secondary school system in teaching how to LIVE. Moderator Reis, emeritus, of Northwestern argued irascibly with young Pion of Seattle, ex Ob-Gyn and now a counsellor and speaker on sexual behavior, who feels that each couple should reproduce no more than their own replacements, i.e. two kids maximum. The emphasis was on the horrendously imminent population explosion. Harry Bailey of Sydney, Australia, felt ours was a patriarchal society and that we as M.D.'s should start by counselling on a one-to-one basis. Cora Au spoke up from the audience and enthused about the work of the local YMCA; Pion ridiculed it as drop-in-a-bucket tactics. He felt we should go all out on TV, radio, other mass media.

Heart transplants, reduced mortality and morbidity, freer abortion, contraception promotion—what does it all add up to? More population. A more aged population. The prospect of a world overpopulated calls to mind the rat experiment—cannibalism back again. Maybe the Near East is a foreboding; maybe the Woodstock gathering is too. Auwe! ■

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The President's Page



To All Members of the HMA:

For well over six months, and in good faith, the officers of the Hawaii Medical Association and the Commission on Medical Services, with its committees, have tried to develop a positive, equitable, and acceptable program to service the Medicaid (Title XIX) patient in Hawaii. Your representatives are well aware of, and fully understand the scope of, what is meant by "free choice of physician and facility." We are constantly working toward protecting this right for our patients.

The time has come when it is my responsibility as president of this Association to inform you that, despite the efforts of your representatives, we are at an impasse.

Some of the reasons are:

- The Department of Social Services has not been aggressive enough—nor inclined to accept innovation in attempting to develop an equitable health care package for Medicaid.
- Health, Education, and Welfare Department regulations are difficult to work with—often they are vague and unrealistic.
- Many physicians in Hawaii are accepting the present substandard level of reimbursement, hoping for retroactive adjustment of these inequitable fees. They also anticipate a realistic future fee level which will truly reflect their usual fee for that service.

This message is an attempt to keep you informed of the Medicaid situation in Hawaii so that you may be kept free of unsubstantiated information or ill-conceived ideas.

I see very little prospect at this time for the Department of Social Services' accepting the usual-and-customary-fee concept for services rendered Medicaid patients.

At present, the arbitrarily chosen conversion factor of \$5 has frozen fees below the customary level in almost all communities in Hawaii. It is unfortunate, but this present situation has definitely affected the cost, accessibility, and availability of care.

I would like to suggest that, if you choose to continue to service Medicaid patients, you should not expect retroactive recovery of usual fees over and above what the DSS is paying on the HRVS with a conversion factor of \$5.

The present untenable situation is inexcusable. It reflects an attempt to control and freeze fees at an unrealistic level. If continued, it will definitely affect the quality of medical care and the right of the Medicaid patient to freely select his own physician or hospital.

I will keep you informed of progress or change in the HMA's attempt to resolve the inequitable and unfortunate situation.

Serge H. Miller M.D.

Repeal the Law Against Abortion!

It is time to restore the interruption of pregnancy by appropriate surgical means to its proper place: a matter of conscience between the pregnant woman and the physician. The fact that such a procedure violates the feelings of persons holding certain religious beliefs is reason for regret, but it is not an adequate reason to deny a woman the right to end an unwanted pregnancy if her physician agrees that she should not bear the child. It is wrong for her to be denied the right to make this decision, and it is doubly, trebly wrong to force the child to become a victim of such denial.

In 1968, the House of Delegates of the Hawaii Medical Association overwhelmingly rejected a proposed resolution which would have placed the responsibility for approving an abortion in the hands of the Department of Health or other appropriate regulatory government agency, under the guidance of a community committee of physicians, attorneys, ministers, and others. The implication was that this degree of liberalization of the law was insufficient.

In corroboration of this interpretation of their action, the Hawaii Chapter of the American College of Obstetrics and Gynecology voted in December, 1969, to press for repeal of Hawaii's 1869 abortion law, and the Legislative Committee of the Hawaii Medical Association made the same recommendation on December 17, 1969.

The recent submission of this question to the members of the Hawaii Medical Association revealed that 95% of them want the law liberalized, though only about one-third want it repealed. One can only wonder whether the desire to see legal restraints retained is motivated by doubt that the consciences of physicians will be equal to preventing unseemly abuse of the operation. Surely they will be equal to it.

It is estimated that between five and fifteen percent of present requests for the interruption of an unwanted pregnancy could be granted if the Model Penal Code were adopted. This would not solve the problem now so vividly documented by the report in this issue of the JOURNAL, of women being sent to Mexico or Japan (if they can afford it!) to have abortions performed. Nor would it alleviate many of the tragedies brought about by compelling a woman to bear an unwanted baby.

The termination of pregnancy is no crime; the crime is in the compulsion to bear an unwanted child. The present legal restrictions on abortion are not only legally unsound, as a court in the District of Columbia recently held, but morally repugnant as well. The decision of whether to interrupt a pregnancy or not should rest with the pregnant woman and her physician. Hawaii's present abortion law should be repealed.

The Cooper Self-Assessment Quiz

In this issue you will find (or *have* found, if you've been going through it from front to back instead of the usual direction) some questions in the field of internal medicine. You can amuse yourself by answering them, and instruct yourself by checking the answers in the back.

These questions are taken at random from the Cooper Hospital Quiz, a self-assessment exami-

nation in internal medicine published monthly under the editorship of William T. Snagg, M.D., Director of Medical Education at the Cooper Hospital, Camden, New Jersey. You can subscribe to the whole quiz for yourself, at \$10 a year, if you like. The price is kept down by subsidies from Smith, Kline and French and The Upjohn Company.

The Regional Pediatric Pulmonary Program

The Kaulikeolani Children's Hospital was awarded \$210,852 by the Regional Medical Program of Hawaii for a pediatric pulmonary program with a pulmonary center to be established at the Children's Hospital. Coincident with this Federal allocation, the Lani Booth Trust gave the hospital \$150,000 for its Center, raising the working capital to over \$360,000. The trustees of the Children's Hospital have therefore named it the Lani Booth Pediatric Pulmonary Center.

The primary goal of the program is to recognize and provide better care for respiratory problems of children throughout the State, and not to cause major shifts in patient load. There are at present five participating hospitals (Children's, Queen's, Kapiolani, Kaiser, and Hilo) with the prospect of additional participants as the program develops. Severe asthma and allergy, respiratory distress or failure of infants, and congenital pulmonary problems are some target diseases, while continuing education of nurses and physicians is also of vital concern. Visiting authorities as well as the core

staff will lecture and conduct symposia on pulmonary problems. On-the-job teaching for nurses will be practiced by the Center. It is envisioned that participating hospitals will rotate their nurses through the Center for short periods of training.

Participating hospitals will receive incubators, monitoring and other equipment to improve their delivery of care. More complicated cases such as those requiring assisted ventilation or elaborate diagnostic studies will be transferred to the Center at the request of the patient's private physician. While in the Center the patient will remain under the jurisdiction of his own physician with the support of the core staff.

Since patient care teaching, and clinical research are inseparable in good medicine, the Pulmonary Program will afford an opportunity to practice exemplary care. Much interest is being generated, and we hope ever-increasing support of the medical community will continue. We are both gratified by the opportunities afforded us, and sobered by the task of achieving these goals.

Gin and Geritol

Alcoholics are prone to certain unpleasant neurological diseases with such sinister sounding names as Korsakoff's psychosis and Wernicke's encephalopathy. These illnesses result from severe depletion of the B group of vitamins seen in heavy drinkers and according to Dr. Pierre M. Dreyfus of the University of California, at Davis, largely preventable by suitable vitamin supplements.

The mind boggles at the thought of ordering such delightful mixed drinks as gin and Geritol, brandy with Berocca-C, rum and riboflavin, and that old island favorite, Primo, plus pyridoxine. Alternatively, perhaps, a little thiamin garnish on the pupus might be the answer to alcoholic neuropathy.

Pride and Prejudice

We are all familiar with today's alienated youth—long-haired, ill-mannered, unwashed. Our reactions range from amusement through disgust to overt hostility. These emotions may, unfortunately, cloud our medical judgment, as is well described by Dr. Teitelbaum of the University of Colorado. He writes: "Recently the Physicians' Poison Consultation Service at the University of Colorado Medical Center has been confronted by several instances of misdiagnosis of drug psychosis. These errors were traced to a failure on the part of the examining physicians to separate long hair and odd clothing from odd behavior as a symptom of disease.

"Recently a young man was admitted to Colorado General Hospital after being transferred from another hospital with a diagnosis of probable psychosis due to drug ingestion. The physicians who had examined him at the referring hospital, and the physicians in the emergency room of Colorado General Hospital, were put off by the fact that this young man had long hair and long-haired friends. He had been brought to the hospital with a chief complaint of peculiar behavior for 36 hours. The syndrome of long hair, long-haired friends, and peculiar behavior was equated with toxic psychosis and the possibility of some other disease was not seriously considered. It was not until he was evaluated by the Physicians' Poison Consultation Service that the possibility of meningitis or encephalitis was entertained. The

correct diagnosis of meningococcal meningitis was then made.

"It is difficult to separate the prejudices of the physician from the realities of the illness, even when the diagnosis is one which can be made readily. When the diagnosis is as abstract as toxic psychosis due to drug ingestion the demands upon the physician are even greater. I would urge physicians in primary treatment areas to look beyond the clothing or habitus of the patient when considering the possible diagnosis of toxic psychosis. Thorough physical examination and investigation is appropriate. Documentation of drug ingestion is essential for the diagnosis to be confirmed. It would be tragic to allow prejudices to interfere with the treatment of the patient. This is a distinct possibility in the case of patients who are brought to the hospital with diseases which may result from taking drugs."

Something Fishy

Observation: Big game fisherman and pathologist Richard Kelly have been studying the stomachs of local marlin. In many of these he has found large ulcers which often contain a worm-like parasite. Dr. Kelly feels that the two are causally related, the parasite being ingested by the marlin during feeding and then burrowing into the gastric mucosa to produce an ulcer.

Observation: Dolphins caught in Island waters and kept in captivity are known to develop stomach ulcers. Veterinarians attribute this to the high histamine content of the fish fed to them.

Observation: Hawaiians and Japanese eat a lot of fish, both raw and cooked, and have a high incidence of malignant gastric ulcers.

In The Bag

Burns of the hand with tendon involvement often cause severe functional disability. Prevention of bacterial growth beneath the eschar is of paramount importance, while early mobilization is essential to preserve function. One approach is to enclose the hand in a plastic bag filled with a silicon-containing fluid, which seems to prevent bacterial growth without causing tissue maceration. The eschar separates early, leaving healthy granulation tissue suitable for grafting, while the hand can be readily exercised within the confines of the bag. ■

WILLIAM PHILIP JONES, M.D.

- A 57-year-old Caucasian government agency administrator had had visual blurring and “dim-out” spells of the left eye for about one year.
- For the past month, he had had episodes of transient paralysis of the right arm and leg, and blindness of the left eye, lasting from 10 to 15 minutes. During these periods his speech would become garbled. The episodes would be followed by apparent return to normal.
- A mild hypertensive, he had a history of myocardial infarctions two years before and again six months before admission. He was on Coumadin and Peritrate. He was a moderately heavy smoker of cigarettes.
- Physical examination revealed a loud bruit over the left carotid area. Ophthalmodynamometry showed decreased pressure in the left eye. Shortly before breakfast on the third day of hospitalization, the bruit over the left carotid disappeared.
- An angiogram of the left carotid was done by selective catheterization of the left common carotid via a catheter inserted into the right femoral artery.
- Answer is below.



The patient, who was asymptomatic, became completely aphasic, with complete right hemiplegia, followed by prompt loss of consciousness. He was taken directly to surgery and a 1½ cm atheromatous plug was removed from the left carotid artery just above its origin. As the procedure was done practically without anesthesia, the patient awakened during closure, which had to be delayed until he could be anesthetized.

The x-ray shows what appears to be a complete occlusion of the left internal carotid, even though the specimen reveals the presence of a pin-hole lumen.

The patient remained symptom-free, except for persistent alexia, until his death from a myocardial infarction, 18 months later.

Submitted by
RADIOLOGICAL SOCIETY OF HAWAII
THOMAS C. BROWN, M.D. ■

This is the eighty-second installment of In Memoriam—Doctors of Hawaii.

John Baptist de Faria

John Baptist de Faria was born in 1871, probably in Portugal. He was a graduate of the School of Medicine and Surgery, Lisbon, 1896, and interned at the Maternity Hospital for Women at Lisbon. Following his hospital work there, he served on the staffs of civil and military hospitals in the Portuguese possessions of Cape Verde and Guinea, Africa. Later he came to the United States with his wife and children and settled in New Bedford, Massachusetts.

In 1902 Dr. de Faria arrived in Honolulu and was licensed to practice in September of that year. His office and residence were located on Alakea Street, and he specialized in obstetrics and diseases of women.

Within a few days of being licensed, Dr. de Faria was implicated by a fellow physician in a romantic tangle, which surely must have been the talk of Honolulu. Dr. Luiz Alvarez, Spanish born physician, brought a clipping from the *Independente*, a Portuguese newspaper published in New Bedford, to the office of the *Advertiser*, to call attention to an article about a Dr. Faria who, leaving his wife and children, had run away with a Mrs. Sanders, who also took her husband's savings when she left. Dr. Alvarez claimed that the Dr. de Faria practicing medicine in Honolulu and the Dr. Faria of the newspaper article were one and the same, and the story appeared, together with Dr. Alvarez's accusations, on September 26, 1902. On the following day a letter from Dr. de Faria was published in the *Advertiser* in which he denied that he was running away or trying to hide his identity, and accused Dr. Alvarez of professional jealousy because he had refused to enter into a partnership with him. However, he did not deny running away with another man's wife, merely stating that he would take up that matter when the sheriff came to get him. A few days later the *Advertiser* carried Dr. Alvarez's rebuttal to Dr. de Faria's letter, in which he countered that he could hardly have thought of offering a partnership to a man he did not know. He also contended that Dr. de Faria did not use his own name on arriving in Honolulu, and

brought no character reference with him, despite knowing that he would have to produce such a reference in order to be granted a license to practice medicine. He further accused Dr. de Faria of giving Alvarez's name to the Board of Health as a character reference without his knowledge or consent. With this the verbal sparring between the medicos comes to an end—at least in the pages of the *Advertiser*.

However, there is an amazing sequel to this affair of the heart, which is recounted in the *Advertiser* for March 26, 1903, under a New Bedford dateline. The story describes how Mrs. de Faria sent her four children to Portugal and then set out with only \$100 to search for her husband. Eventually she found herself in San Francisco, where the trail ended. While working at odd jobs in the hope that some clue would turn up, Mrs. de Faria happened to pick up a Honolulu newspaper, and, in turning through the pages, came across Dr. de Faria's business card. Her meager savings were just enough to pay her passage to Honolulu. On arrival, her sudden appearance and the tale of her untiring search so moved her husband that the two were reunited. According to the story the reunion was further helped by the fact that the romance between the doctor and Mrs. Sanders was cooling, due to the lady's interest in a young Army officer. In any event, the tale ends with the doctor and his wife departing secretly for Portugal "never to return," and leaving Mrs. Sanders deserted and without funds in Honolulu.

Whether or not Dr. de Faria went to Portugal in 1903 is not known, but he is listed as President in the articles of association of the Liberdade Publishing Company, Ltd., filed in October, 1903, in Honolulu. Certainly, he had returned to Honolulu and was in practice by 1904, when he became a member of the Hawaiian Territorial Medical Society.

Leaving the Islands in August, 1905, the doctor set out on the first leg of a trip which was to take him to Portugal, France, and Germany to study and visit medical institutions. On his return he located in Oakland, California, where he practiced for a number of years. The 1923 Medical Directory lists him as still living in Oakland, but after that he is not listed and nothing further is known about him. ■



Hawaii Academy of General Practice

THE PHYSICIAN IN THE HOSPITAL

It seems to me that the complexities and liabilities of medical staff work in hospitals have already, and will even more in the future, discourage physicians from participating in it.

Physicians, after all, should concern themselves primarily with the direct care of their private (or assigned) patients. This is never an eight to four job. A surgeon, for example, scheduling an operative procedure, often spends a good deal of time (the charge for this is not added on top of the surgical fee, though the fee reflects preoperative, operative, and postoperative care) confirming the diagnosis, planning the best approach, worrying about the unexpected; he may not sleep well the night before! At the operation itself he may meet problems that turn sweat into blood. Even afterwards, his mind constantly reverts to the case—as he is driving to the office; in between the systolic and the diastolic of his next patient; at home in lieu of the columnist he thinks he is reading in the evening paper. This goes on day after day until his patient is “over the hump.” If the surgeon fails to bring his patient around to good health once again the case stays in his mind long afterwards as a hurt.

Multiply this experience by the many cases a surgeon might have going at various stages, and by the many physicians thus deeply occupied in all their various fields of medicine, and you will quickly wonder how a physician, any physician, can ever (a) help with his family, (b) concern himself with administrative matters in his office or hospital, (c) do community work, (d) have any leisure or enjoy his “time off,” or (e) much less occupy himself with politics, particularly medical politics.

How can a profession, so concerned with people's lives in health or in sickness, be expected to take the time to defend itself against the slurs of vote-hungry politicians or know-it-all social planners?

Hospital staff work used to be very simple—and infrequent. As we become more burdened, however, with the requirements of third-party systems, Medicare being the prime example of such a “system,” in the way of utilization review, etc., is it any wonder why physicians seek only

“courtesy” status on the medical staff, and generally avoid “active” status? Is it any wonder, particularly in view of unsought, unexpected, and often unwarranted litigation as a consequence of participation in medical staff volunteer work, that all the doctor wants to do in a hospital is to be left alone to mind his own business between his patient and himself? It is indeed to be marvelled at, that the high legal risk specialties continue to attract fearless, scientific, investigative practitioners, whose prime working place is the hospital.

Nevertheless—burden, tedium, and risk notwithstanding—we as physicians should not—cannot—“bug out”!

What, then, is the answer?

We need to impose upon ourselves a firmer reward/penalty system in medical staff work.

The privilege of being able to admit one's patients to a hospital should be encased in responsibilities. Let us do away with the rather meaningless status of “being on the courtesy staff”—except in terms of the hospital extending to us the occasional “courtesy” of letting us treat a patient therein, as in an emergency situation. Let us redefine hospital staff privileges to mean the granting of the right to admit and care for patients **ONLY** if the physician applicant agrees to assume active status and participate **ACTIVELY** in medical staff duties. Of course, there is a distinction between “privileges to admit” and “operating privileges.” The former is commensurate with the physician's assumption of responsibilities in medical staff work; the latter is a secondary consideration necessary in delineating the scope of the physician's practice in that hospital.

I would reclassify hospital staff divisions, therefore, as follows:

Provisional: A physician applicant granted the privilege of provisional membership must agree to work for Active staff membership. He will be on probation the first year, during which he must participate fully in assigned work of the medical staff. His period of probation may be extended for a stipulated period thereafter, for cause. He will be allowed to admit his patients to the hospital and to practice medicine, surgery, or obstetrics within stated limitations, with or without observation. He must attend all meetings of the depart-

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University of Hawaii.....

Neal Gault, M.D., professor of medicine and associate dean of the school of medicine, was recently honored by the Japanese government for his role in developing "an unparalleled two-year postgraduate curriculum for training young doctors from mainland Japan and Okinawa." The award, entitled "Supreme Japan Medical Association Award," was in the form of a beautiful gold-on-wood plaque and a citation given at Akita, Japan. The training program at the Central Hospital in Okinawa is being continued by Bob Sudrann, M.D., a cardiologist and a professor of medicine of the University of Hawaii School of Medicine. It is hoped that this program can be continued after the reversion of the government of Okinawa to Japan in 1972.

On the first of January, 1970, the School of Medicine issued a 126-page *status document* intended to replace the original Tschirgi report, now six years old. The 12 chapters of this document deal with history, student body, curriculum, faculty, library, research, clinical relationships, facilities, community programs, international programs, the four-year medical school, and the Pacific Medical Center. The status document notes that at the present time there are approximately 150 full-time faculty members and nearly 250 voluntary part-time faculty members in the school of medicine. There are now 16 departments and clinical sections, the most recent of which, radi-

ology, is being headed by **Richard D. Moore, M.D.** Rehabilitation medicine is under the direction of **R. F. Shepard, M.D.**, and, jointly with the School of Public Health, the section on community medicine is chaired by **Fred I. Gilbert, Jr., M.D.** The status document discusses possibilities for a third year of instruction in 1970-71 with a small class of 12 students, the balance of the class transferring to mainland schools as has been done heretofore. Half of the class could be in residence at Leahi Hospital and the other half spread between Saint Francis, Queen's, Children's, and the Tripler hospitals. In subsequent years, as the class size increases, other Honolulu hospitals would be asked to participate. In 1971-72 there would be a full class of third year students, and a small class of fourth year students could begin. In addition to the usual training involving ambulatory patients, it is hoped that some of the senior students could be assigned to community health centers such as that at Nanakuli-Waianae, and possibly at the Lyndon B. Johnson Tropical Medical Center in American Samoa.

Implementing a directive by President **Harlan Cleveland**, a faculty committee is planning the formation of a new Division of Biological Sciences at the University of Hawaii. It is likely that this division will include at least joint status with the departments of biochemistry, genetics, physiology, and anatomy. ■

ROBERT W. NOYES, M.D.

Following the **Public Relations Committee** recommendation, the Council adopted the AMA policy on medical care: "It is the basic right of every citizen to have available to him adequate health care, it is the basic right of every citizen to have free choice of physician and institution in obtaining medical care, and the medical profession, using all means at its disposal, should endeavor to make such medical care available to each person."

Temporary Disability Insurance (TDI) is available through the HMA at a rate of 70¢ per \$100 of covered monthly payroll, which is below all other quotes that ran from 85¢ to \$1.10. Industrial Indemnity is a large, competent firm based in California, and certainly able to service our needs.

The **Workmen's Compensation Committee** has been discussing with insurers and the Department of Labor the principle that doctors are entitled to the "prevailing fee" which they charge to other patients, but there still seems to be a great deal of confusion as to how this "prevailing fee" is going to be ascertained. This is receiving a new outlook from the impact of the new California R.V.S. Drs. Warshauer and Watson attended a meeting in California on this new schedule representing the **Fee Survey Committee**. This schedule is far more complicated than the old one, with more modifiers and entirely different unit numbers, and requires different conversion factors than we have used heretofore. A new five-digit code has been developed so that all the numbers are new. The **Fee Survey Committee** has voted to accept this new California form for Hawaii, so prepare yourselves for a new set of headaches in determining fees. It is to be pointed out, however, that the R.V.S. is not supposed to be used right down the line. You're supposed to set your own fees for the more common procedures that you do and turn to the R.V.S. only for something uncommon. The conversion factors for the R.V.S. values are to be derived from what you actually charge, not the reverse.

The **Bureau of Research and Planning** is actively setting up the arrangements for Dr. Beverly C. Payne to implement the recommendations of the Sanazaro Report. Dr. Payne's study is to cover the entire State, both in-hospital and ambulatory care. All hospitals will be included.

Evaluation of care is to be a continuing process. Doctors in practice are going to be asked to keep a log of what they do, at least for a short time. The University of Hawaii is being asked to cooperate in the program, including perhaps appointing Dr. Payne to a professorship and involving medical students in his research.

The **Legislative Committee** voted to offer the position of Legislative Counsel to Mr. Cleson Chikasuye and is continuing to work out proposals relative to malpractice insurance improvement. On November 26 they met to discuss Act 97 hospitals as it affects hospitals formerly operated by the counties. The only county to send representatives was Maui. They presented their point of view, asking for a local governing body, and the representatives have been asked to prepare their recommendations for appropriate legislation prior to the next meeting of the Legislature.

The **Scientific Program Committee** is busy getting ready for the next HMA meeting. They have decided to have only four mainland speakers and will utilize more local talent.

The **Arrangements Committee** plans golf at Mid-Pac, a banquet at Shriner's Country Home, a cocktail hour and sirloin steak dinner at Mid-Pac, plus fishing and tennis tournaments.

The **Hospital Committee** was advised that the Department of Health is planning to put PAS into all Act 97 acute hospitals and pressure is being applied for more hospitals to use PAS to establish a uniform means of measuring the quality of medical care in the hospitals.

The **Careers Committee** is proposing that a full-time professional employee be engaged who can really give the students an education on the opportunities in health careers through a much larger program than has been carried on heretofore.

The **Diabetes Committee** noted that Kauai has used a new method of detection which is being studied for possible use in South Pacific Island areas. Maui and Hawaii will have drives in January using Dextrostix.

The **School Health Committee** is asking the State why the position of School Health Physician is still unfilled and recommends that the school lunch services supervisor be either a nutritionist or a dietician.

Aloha.

JOHN BROWN, M.D.

COUNCIL MEETING

December 7, 1969—10:00 A.M.

Mabel Smyth Conference Room, 2d Floor

PRESENT

George H. Mills, presiding; Drs. Batten, Chinn, Dang, Iaconetti, Jones, Lowrey, Miyashiro, Moore, Sloan, and Tomita; plus Drs. Winfred Lee, Goebert, Oren, Omura, Nordyke, Botticelli, Uemura, Richard K. C. Lee, Stephenson, Ikezaki, Mamiya, and Robert Katsuki, plus Mrs. Clifford Moran, and Messrs. Harold Brown and Garrett Chun.

MINUTES

The minutes were circulated, reviewed, and discussed. The section under the Commission on Public Health relating to the Maternal & Perinatal Mortality Study Committee was discussed by the Maui Councilor. He questioned the recommendation and action taken that "an in-depth study be made in regard to short courses on Maui in midwifery." The Maui Councilor stated that at the last meeting this recommendation was discussed and any statement made was in jest. He asked that that portion be lifted from the records.

ACTION:

It was voted to delete the action pertaining to short courses on midwifery on Maui.

It was voted to approve the minutes of the September 28 meeting as amended.

MODIFICATION OF AGENDA

The President asked the Council for permission to modify the agenda by having the reports of the commissions and committees come before the other business of the Council.

ACTION:

It was voted to receive the reports of the commissions and committees.

REPORTS OF COMMISSION AND COMMITTEES

Commission on Education and Scientific Research: The Commission had one recommendation: (1) That the problem of the newly emerging health specialties be referred to a newly-formed committee to be appointed by the President of HMA and this be of highest priority.

ACTION:

It was voted to approve this recommendation.

Drs. Botticelli and Nordyke presented an up-to-date report on CHEC (Continuing Health Education Council). The report of the consultant, Dr. Alexander S. Anderson, and his recommendations had previously been circulated. CHEC is following these recommendations, which were approved by its Executive Committee. Dr. Botticelli pointed out that the fiscal intermediary for CHEC will be the Research Corporation of the University of Hawaii. It was reported that CHEC should incorporate as a nonprofit association to achieve community recognition and legal form, to provide for con-

tinuity, and to acquire stability as a fiscally responsible organization. Under the administrative organization there will be staff including a full-time director, University liaison agent, and information center coordinator.

It was questioned whether or not the neighbor islands will be able to have visiting professors frequent their societies. Dr. Botticelli pointed out that in the consultant's report he states that "The Council (CHEC) should not enter the arena of sponsoring continuing education programs in competition with the member organizations which it represents. Its two major contributions should be the provision of mechanisms by which appropriate objectives for continuing education programs can be obtained and the provision of supporting services for the implementation and evaluation of the programs which are mounted by the member organizations."

ACTION:

It was voted to approve the report of the Commission on Education and Scientific Research.

Commission on Internal Affairs: The Commission had two recommendations as follows: (1) That the Council consider a token payment for Aloha Temple earmarked for a special transportation fund for crippled children from the Pacific Basin, and (2) that the Council consider working out an agreement with the Conference Center of the University of Hawaii to help with the HMA's Annual Meeting.

ACTION:

It was voted to approve the token payment for Aloha Temple earmarked for a special transportation fund for crippled children from the Pacific Basin.

Mr. Harold Brown, Program Coordinator of the Division of Continuing Education and Community Service at the University of Hawaii was asked to explain the functions of the Conference Center. He referred to the memorandum of agreement and the proposed preliminary budget he prepared and which had been circulated for Council perusal.

ACTION:

It was voted that recommendation No. 2 be approved.

Commission on Legislation: The Commission made two recommendations: (1) That a poll of the membership on the removal of the residency clause in the Medical Practice Act be taken and if the membership votes in the affirmative, then a bill should be drafted to repeal the residency requirement and the temporary and limited license; and (2) that the Medical Practice Act Committee develop a position statement for the HMA regarding its relationship with osteopaths so that the way can be paved for a common examining board.

Dr. Richard Lee reported for the Legislative Committee's activities in general and the special meeting on Act 97 in particular.

The Councilors representing their respective counties were advised to go back to their society and have legislation relative to Act 97 discussed. It was recommended that when Dr. Uehara is in Honolulu again that a meeting be set up between the chairman of the Legislative

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★**Pulmonary Emphysema: A Treatment Manual for Patients**

By *Alvan L. Barach, M.D.*, 101 pp., \$4.95, Grune & Stratton, 1969.

CONCISE; excellent; should prove to be very helpful to all. Many practical hints.

BERNARD YIM, M.D.

Progress in Clinical Psychology, Vol. 8: Dreams and Dreaming

Edited by *Lawrence Edwin Abt, Ph.D.*, and *Bernard F. Riess, Ph.D.*, 192 pp., \$9.75, Grune & Stratton, 1968.

THIS EIGHTH VOLUME of the series, designed to pull together information in all areas of psychology of interest to clinical psychologists, is not one with too much in the way of material immediately relevant to clinical practice. Granted that the chapter on sleep disorders in children (Kales, Jacobson, and Kales) and one or two of the chapters on dreaming (especially, clinical implications of recent dream research) do contain this sort of material, most of the book is directed at more long-range understanding of how humans function. The book is divided into four chapters on sleep, five on dreaming, and one on suggestion. As might be expected, they vary somewhat in quality, with Murray's "Sleep Deprivation and Personality Adjustment" illuminating and readable, while Webb and Agnew's "Measurement and Characteristics of Nocturnal Sleep" significant but of interest to a limited range of readers and somewhat difficult to understand in places. However, all of this is relative, for the chapters are generally on a high level of competence and the book is one which should be of interest to most clinical psychologists, whether in practice or a university setting. As with (apparently) all psychological publications, one wishes here for a slightly less turgid, less "scientific," and more readable literary style—a wish apparently doomed for the moment.

JEROME BOYAR, Ph.D.

Physical Diagnosis: The History and Examination of the Patient, 3rd Ed.

By *John A. Prior, M.D.*, and *Jack S. Silberstein, M.D.*, 436 pp., \$10.50, The C. V. Mosby Company, 1969.

THIS VOLUME is obviously designed for medical students still unfamiliar with the special language of medicine. The material is presented briefly and concisely, albeit somewhat pedantically. Each new term is italicized and accurately defined. Appropriate illustrations, liberally used, supplement the text.

In many ways what may initially appear to be shortcomings in this book are actually strengths. It avoids the pitfall of attempting to appeal to a much wider audience by keeping detail and minutiae to a minimum, thereby enhancing its usefulness to the medical student. A conscientious effort is made to avoid the use of eponyms.

Wherever possible, physical findings are correlated with physiology. This is especially evident in the chapter on the cardiovascular system, which incidentally is the longest as well as the most detailed chapter in the book.

This is not an encyclopedic reference work, but a rapid, uncluttered review of physical diagnosis which should benefit even the busy practitioner.

GEORGE SUZUKI, M.D.

★ means highly recommended.

Genetics and Counseling in Medical Practice

By *Leonard E. Reisman, M.D.*, and *Adam P. Matheny, Jr., Ph.D.*, 215 pp., \$12.75, The C. V. Mosby Company, 1969.

THIS FINE LITTLE book is not heavy to carry around; it is inexpensive; it is easy to read; and more important, it is easy to understand. The data are not extensive, but quite adequate. The major problem with this text book is that it is only a primer for anyone interested in either genetics or genetic counseling. I am sure a lay person, or even a medical student, could get a good deal of information from it. However, for someone who is to do any genetic counseling, I believe this book is useless. The data in the book should be known by anyone who would venture to do any counseling, and there are not enough data to make it a good reference text. I would think the best place for this book would be in the paramedical section of a medical library.

S. H. WAXMAN, M.D.

Pathology Annual, Vol. 4

Series Editor *Sheldon C. Sommers, M.D.*, 344 pp., \$14.00, Appleton-Century-Crofts, 1969.

THIS IS THE fourth volume in a series of collections of well-edited and informative essays on a broad range of pathologic subjects. The present articles include clinical pathology (e.g., "Normal Values in Pathology"; "Myeloproliferative Disorders"), anatomic pathology (e.g., "In Situ Carcinoma of the Breast"; "Soft Tissue Tumors"), and more esoteric areas of interest to pathologists ("Computer-Aided Instruction in Pathology"; "Breaking the Barrier Between Pathologist and Epidemiologist"). Although this is an annual publication, some articles are up to date and have immediate application, such as "The Intensive Care Unit," and "Pathology of Progress." The essays vary somewhat in style and quality, but over-all are well written and illustrated. They are aimed at pathologists, but many articles in these first four volumes would be of value to clinicians.

ANN B. CATTS, M.D.

Practical Management of the Allergic Child

By *Vincent J. Fontana, M.D., F.A.A.P., F.A.A.A.*, 371 pp., \$15.00, Appleton-Century-Crofts, 1969.

THIS SLENDER VOLUME is rather fully priced. It presents a summary of present-day practice of pediatric allergy, and could be of interest to the pediatrician or general practitioner who wants to know more about the field. I feel there is a discrepancy between the author's belief that "the true value of hyposensitization in the treatment of asthma and hayfever is unconfirmed to date," and the full treatment given this type of therapy in the text. There is one page of color photographs of dermatoses of mediocre quality.

ALEXANDER ROTH, M.D.

Basic Medical Radiation Physics

By *Leonard Stanton, M.S., F.A.C.R. (Assoc.)* 644 pp., \$9.50, Appleton-Century-Crofts, 1969.

THIS BOOK, by an experienced professor of radiological physics, brings the subject matter up to date for both new and experienced students. Its development took many years of formal classwork and laboratory experiments,

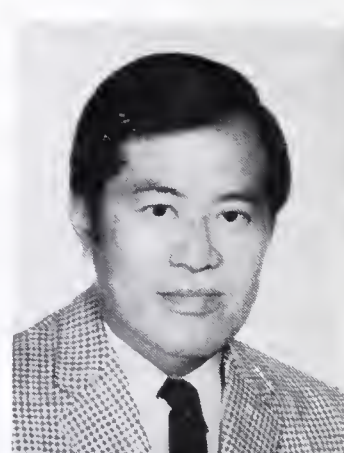
continued page 254



Garth Y. Morimoto, M.D.
1010 South King Street, Suite 703
Honolulu, Hawaii 96814
ORTHOPEDICS
Indiana University—1964
Internship—St. Luke's Hospital,
San Francisco—1964-1965
Residency—Hines V.A. Hospital—
1965-1966
Lutheran General Hospital—1966
Hines V.A. Hospital—1966-1969



Hideo Namiki, M.D.
Queen's Medical Center
P. O. Box 861
Honolulu, Hawaii 96808
PATHOLOGY (AP)
Maebashi Medical College—1949
National Yokohama Hospital—
1949-1950
Internship—Queen's Medical Center—
1967-1968
Residency—Yokohama University
School of Medicine—1950-1956
University of Oklahoma School of
Medicine—1956-1961



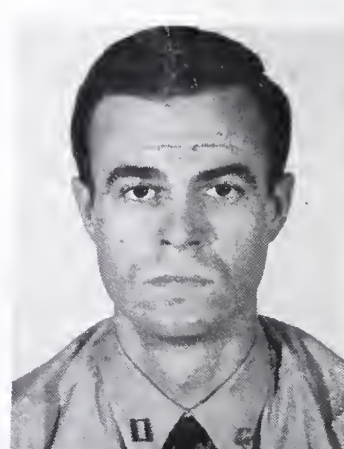
Theodore Chun, M.D.
1441 Kapiolani Blvd., Suite 804
Honolulu, Hawaii 96814
PSYCHIATRY
University of Munich, Germany—
1961
Internship—Kuakini Hospital—
1962-1963
Residency—Hawaii State Hospital—
Queen's Medical Center—1963-1966



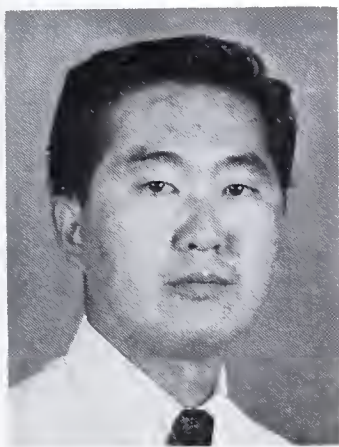
Joseph A. Palma, M.D.
30 Aulike Street, Suite 601
Kailua, Hawaii 96734
INTERNAL MEDICINE
Georgetown University,
Washington, D.C.—1962
Internship—D.C. General Hospital,
Georgetown Division—1962-1963
Residency—D.C. General Hospital,
Georgetown Division—1966-1969



William B. Short, Jr., M.D.
Leeward Clinic
Aiea, Hawaii 96701
GENERAL PRACTICE
Emory University—1958
Internship—Grady Memorial Hospital
—1958-1959



Michael J. McDonald, M.D.
1827 Wells Street
Wailuku, Maui 96793
ORTHOPEDIC SURGERY
University of Wisconsin
Medical School—1962
Internship—Kuakini Hospital—
1962-1963
Residency—Hines—
Shriners Orthopedic Surgery Program
—1965-1969



George Shimomura, M.D.
 94-239 Waipahu Depot St., Suite 105
 Waipahu, Hawaii 96797
OBSTETRICS-GYNECOLOGY
 University of Oregon Medical
 School—1964
 Internship—San Joaquin County
 General Hospital—1964-1965
 Residency—San Joaquin County
 General Hospital—1965-1968
 University of California Medical
 Center, San Francisco, California—
 1968-1969



Thomas H. Sakoda, M.D.
 1441 Kapiolani Blvd., Suite 518
 Honolulu, Hawaii 96814
NEUROLOGICAL SURGERY
 Yale—1961
 Internship—St. Vincent's Hospital of
 City of New York—1961-1962
 Residency—St. Vincent's Hospital of
 City of New York—1962-1963
 University of Kansas Medical Center
 —1965-1969



Jared Brett Morris, M.D.
 1133 Punchbowl Street
 Honolulu, Hawaii 96813
DERMATOLOGY
 University of California,
 San Francisco—1962
 Internship—San Francisco General
 Hospital—1962-1963
 Residency—San Francisco General
 Hospital—1963-1964
 Hospital of the University of
 Pennsylvania—1966-1969



David Johnson Andrew, M.D.
 888 South King Street
 Honolulu, Hawaii 96813
INTERNAL MEDICINE
 Johns Hopkins—1962
 Internship—Johns Hopkins—
 1962-1963
 Residency—Minneapolis V.A.
 Hospital—1965-1968



Walter W. Y. Chang, M.D.
 1374 Nuuanu Avenue
 Honolulu, Hawaii 96817
ALLERGY
 Northwestern University—1955
 Internship—St. Luke's Hospital,
 Chicago—1955-1956
 Residency—Veterans Administration
 Research Hospital, Chicago—
 1956-1957
 Passavant Memorial Hospital,
 Chicago—1960-1961



Carl W. Lehuan, M.D.
 888 South King Street
 Honolulu, Hawaii 96813
PEDIATRICS
 Kansas University School of
 Medicine—1964
 Internship—Kuakini Hospital—
 1964-1965
 Residency—Kauaikeolani Children's
 Hospital—1967-1969

Of Deadlines and Managing Editors

We had dutifully overindulged in food, drink, and daylong football telecasts to celebrate the coming of the New Year. Thus, with the Year of the Dog upon us, we are naturally in the doghouse, for it suddenly dawns on us that this column is past due. We are about to dial in our apologies when as if clairvoyant, our ever so faithful managing editor summons us over the same line . . . "Happy New Year!" Lee intones so sweetly. We melt. Perhaps the deadline has been extended. We chat friendly-like about her Xmas eve activities. . . . Then, the boom is lowered: suddenly we sense a change in mood. Lee is wondering if we had anything written that she can send to the printers. We who are about to die, must do so bravely and honestly, so we admit there is none. Valiantly we try to explain about the live football telecasts, the kids on vacation, the parties we had to attend, the flu epidemic swamping our offices, the touch of flu we had ourselves of late, and et cetera and et cetera. These and a hundred excuses flit through our minds, but somehow they add to naught for there is that ever so familiar, gentle yet stern voice explaining that next Monday is the absolutely absolute deadline. So we succumb, as we have always succumbed over the past five years, and reconcile ourselves to the fact that there is no postponing the inevitable and that we really have to get started. . . . We've often wondered how this JOURNAL would ever get out without Lee McCaslin's "friendly persuasion."

Transplant Symposium

(Continued from previous issue)

Following **Tom Starzl's** intelligible lecture, "Surgery of Organ Transplantation," moderator **Dick Blaisdell** (who would make an ideal official welcomer for the Hawaii Visitors Bureau) effused: "Mahalo to the outgoing speaker, and Aloha to the new speaker." We were proud of **Arnold Siemsen**, director of SFH Hemodialysis Center, who—if he was a little awed by the presence of world authorities on organ transplantation—did not show any indication of it, and gave an excellent resumé of the current status of hemodialysis and renal transplantation in Hawaii which compares favorably with other large medical centers on the mainland. During the panel discussion that followed, **Robert Good** explained that "every

kind of genetically determined immunological deficiency is related to malignancy. The ultimate use of immunology is to eliminate the first tumor cells, but immunological means is not for large tumors." He launched upon a protracted dissertation on IgA and IgM and the reasons why immunological means cannot be used for tumor therapy. When he finished, **Dick Blaisdell** said grimly, "Mahalo after that explanation." **Dick Ando**, who sat next to us, commented sotto voce, "It must be pretty good. . . . I don't understand it."

On Monday morning, we were welcomed by smiling **Joe Oren**. **Dick Mamiya** moderated and we were treated to **Robert Good's** "Tissue Typing" (an intellectual barrage which was impressive and nonetheless incomprehensible). **Noboru Oishi** then reported on tissue antigens among ethnic groups in Hawaii (a joint project with **Mitsuo Yokoyama** et al of the Kuakini Medical Institute). **Noboru's** report showed that the Chinese apparently have less tissue antigens than other local racial groups.

Before starting his final lecture, "The Future of Organ Transplantation," **Tom Starzl** glanced towards **Mitsuo Yokoyama** in the audience and in a reverent tone described him as the world authority on IgG. (We are happy to report that under our close scrutiny, **Mitsuo's** head only swelled a few centimeters, but there was that ridiculously happy grin pasted on his face all day and for many days to come.) "Now, may we have the first slide please," **George Nagao**, who was the projectionist for the day, reported plaintively, "Dr. Starzl, you have the controls." "Then we are all in trouble," he retorted as he searched for the controls on the podium. "The projectionist is the usual scapegoat in early-morning slide lectures," he explained sympathetically. Poor **George** certainly had trouble enough for the fuse blew during the slide session.

Tom Starzl explained some of the technical difficulties encountered in liver and lung transplants and discussed graft rejections. We learned that technical errors from vascular anomalies account for many of the deaths in liver transplants, and that livers can be preserved for only one day. The same triple regimen of Imuran, prednisone, and ALG is used in liver transplants. **Tom** pointed out that here in Hawaii, all Caucasians would be potential recipients and all Hawaiians and Japanese will be potential donors, since these groups have little antigen.

Following the coffee break intermission, physician-lawyer and editor of *Professional Liability Newsletter*,

SHUNJI KAY IKUTA, M.D. 1903-1969

Dr. Shunji Kay Ikuta died July 3, 1969, at the White Memorial Medical Center in California. He was born in Honolulu, April 8, 1903. He graduated from McKinley High School in 1922 and attended the University of Hawaii, 1922-24. Following graduation from the College of Medical Evangelists in 1929, he interned at the Santa Fe Hospital in Los Angeles. He took graduate work at the University of Pennsylvania and at the University of Vienna. He returned to the University of Pennsylvania for extended study in neuropsychiatry and served for a while on the staff of the state psychiatric institution at Norristown. He was a Diplomate of the American Board of Otolaryngology and also had a degree in law, which was granted in 1952.

Dr. Ikuta moved to the Los Angeles area after World War II and was living in Monterey Park, California, at the time of his death. He is survived by his second wife, Mary Takata, and three sons, Clyde, Robert, and Michael.

WILFRED T. OHTA, M.D.

David Rubsamen of Berkeley, described "the many legal trolls waiting under the medical bridges to trap the unwary in the future when organ transplants are commonplace." The first troll, he says is the definition of death. Under existing law, there is no codification of brain death (i.e., when the brain shows a flat EEG for 48 hours). Other trolls under future medical bridges include the matter of "informed consent" and the allocation of organ resources. A final troll is the problem of social issues such as overpopulation, pollution, etc., which could result from keeping men alive until they are 100 to 125 years old. David warned, "Perhaps we are reaching a time when we will be able to say that technological progress per se is not automatically good. Maybe it's going to prove out that we have to make some really difficult decisions in the area of the biological revolution which is now taking place, and that there will have to be some law limiting this progress. . . ."

We attended the transplantation banquet at the Hikai and managed to get within a stone's throw from **Irvine Page**, but even with several fortifying drinks under our belts, we lacked the temerity to go up and talk to one of the great outspoken medical thinkers of our times. In characteristically relaxed and rambling fashion, Dr. Page discussed the ethical aspects of transplantation and we managed some desultory notes: "Ethics is a nice thing to talk about. . . . The Federal Government even spent \$150,000 for a symposium on medical ethics. . . . The concept of just what is ethics is widely misunderstood. . . . People too often think of medical ethics as a rule book of absolutes dealing with what is legal and what is illegal. It is not that at all. . . . Ethics is a manual of good behavior; like an Emily Post of medical behavior that enables a physician to get along with other physicians and his patients. . . . Medical behavior has to watch itself—not to give in to contemporary behavior, or we'll end up like rabbits (sic). . . . The transplantation of kidneys was handled according to regular scientific procedure; i.e., get evidence, marshal it, and then publish. . . . This evidence was not presented in the case of Cape-town. . . . Anyone who abrogates this is doing injustice. . . . This is true for cardiac transplantors and any others who do not follow this procedure. For example, with **Andrew Ivy** and **Krebiozen**, it took 13 years of legal entanglements to demonstrate that there was nothing. . . . Yet presented 13 years later to a lay jury, they still found some evidence that it worked. . . . Unfortunately, everyone is making medical decisions. . . . There is also a question of priorities. Should children be kept from kwashiorkor? Should we spend \$50,000 to keep a 55-year-old alive? What you do with life takes on a different color when you consider life as eternal. . . . As **Alvarez** says about small strokes, 'Death takes little nibbles out of you.' . . . There is no such thing as an absolute value in ethics. . . . It becomes more nebulous. . . . We must not abrogate our values to the Federal government, the AMA, or anyone else. . . . There is no crisis in medicine and we have a body of knowledge to keep clear. . . ." (We were relieved to learn that the "medical ethics" we keep harping about is an unwritten code of behavior, and a rather nebulous one at that.)

Visiting Physicians

We attended the early morning HCMS sponsored lecture, "What Every Physician Should Know About Diabetes" by **Mannuel Tzagournis**, assistant prof of medicine, Ohio State University, a pleasant-faced, beamingly deep-voiced speaker closely resembling our favorite TV private eye, **Mannix**. With excellent slides and a systematic logical presentation, he helped clear some of the fog related to hyperlipoproteinemias and their relationship to diabetes. **Mike Okihira** wondered if there was any real correlation between arcus senilis and lipids, and **Manuel** reassured him that there was.

The visiting pediatrics professor at KCH was **Robert Lawson** from Northwestern, a grizzly, bespectacled, in-

tellectual with a low, growling voice and a shock of brown hair, built like a TV wrestler, whose wit and anecdotes endeared him to his flock at the Monday noon lectures.

Bob pleaded for the continued routine use of vitamin K in preventing hypoprothrombinemia in the newborn. **Harry Shirkey**, our local pediatrics professor, nodded approbation and described the cyclic trends in medicine, with hands in air describing the peaks and vales. One dean of medicine had told Bob that each generation fails to learn from the previous generation and has to learn for itself.

Bob feels that doing a lot of tests does not necessarily reassure the family. He warned, "There is the danger of physicians becoming the pathogenic agent in perpetuating illnesses. . . . The doctor who treats a patient is apt to give guidance, while the doctor who treats symptoms writes prescriptions."

Conference Humor

The death conference revolved around a 56-year-old woman with tophaceous gout, bacterial endocarditis, and meningitis. **Melvin Levin** gave an excellent resumé of the characteristics of gout. He pointed out that ethanol consumption was directly correlated with acute attacks, since elevated blood lactate levels lead to high serum uric acid, as shown by human experimentation with seven ounces of rye whiskey. **Melvin** commented skeptically, "I don't know why they had to be compensated for the experiment, or why rye was chosen." Curious **Pat Walsh** asked, "How should we treat asymptomatic hyperuricemia?" **Melvin** hedged, "That is a philosophical question, and luckily I am not a philosopher."

Life In These Parts

The "Medically Speaking . . ." program, *Doctors Behind the Scenes*, focused on the roles of the radiologist, the pathologist, and anesthesiologist. **Claude Caver**, who was monitoring the phone calls caught this one: "What is the effect of laughing gas on a mother or child?" and was heard punning to himself, "That's a laughable matter." Someone wanted to know "What can be learned by examining the feces?" and **Walter Young** grumbled, "That's a shitty question." Pathologist **Paul Tamura** when asked, "Are there different kinds of pathologists?" answered forthrightly, "There are good-natured ones as well as cantankerous ones."

The following was extracted from a discharge summary we had dictated on a patient with angina: "The patient noted a transient left sub-memory oppression, and felt diaphoretic and weak. . . ."

Yutaka Yoshida's love for camellias is second only to his love for tennis. When he learned that Judge Haynsworth, who was rejected as a supreme court judge, was a camellia fancier, he stated, "Anyone who loves camellias cannot be all bad." (Hereafter known as Yoshida's Law.)

After years of envying patriarchal **Don Marshall** ambling comfortably in slippers even to coat-and-tie functions (because of a pair of trigger toes which orthoped **Ivar Larsen** has been itching to correct) we were devastated by the sight of Don walking along in a pair of shoes. We wondered if he had finally submitted to the surgeon's knife, but Don admitted sheepishly, "I finally found a pair of comfortable shoes." He wears them only for special occasions because these Swiss "Bally" shoes cost \$45 a pair. We still prefer Don in slippers.

We queried **George Goto** about the liberalized abortion law now that Senator Yano and Governor Burns, both Catholics, have made their famous stands that "abortion should be a private thing between the physician and the patient and a moral rather than a legal issue." George, with characteristic solemnity, carefully chosen words, furrowed brow, and slightly cocked head,

continued page 244

Hawaii

No meeting was held in November.

The annual meeting was held December 11 at the Hilo Yacht Club and the following were elected: George Bracher, President; Verne Adams, Vice President; Walter E. Batchelder, Secretary; Theodore Oto, Treasurer; Haruto Okada, HMA Delegate; T. David Woo, HMA Alternate Delegate; S. Kasamoto, Board of Censors.

Honolulu

Approximately 225 physicians and attorneys attended the October 7 meeting to hear a symposium on inter-professional practices. Two announcements were made prior to the program. Prompt action on the Foundation program for member doctors was requested. The practice of an osteopathic physician in Waikiki who makes arrangements with hotels to send him patients was noted and a request made for doctors to advise the Society of their willingness to answer calls in emergencies. At the business portion of the meeting a report was received from the committee appointed to advise what is needed to make membership in the county, state, and national organizations voluntary. A motion was made to reaffirm the present mandatory requirement. Following a lengthy discussion, it was moved to postpone action and to have

the committee prepare the pros and cons of this requirement at the next meeting.

Approximately 200 members attended the November 4 meeting. The following new members were introduced: Charles W. Barnes, Jared B. Morris, and Kirsten Vennesland. Dr. Keith Kuhlman announced that the Health Department and General Webster of Civil Defense wishes to congratulate the doctors on their participation in the last disaster exercise. Three panelists, Messrs. James P. Nordyke, Richard Griffith, and James Watts, discussed the advantages and disadvantages of forming a professional corporation. Further reports on mandatory membership were received. Dr. Clarence Sugihara was appointed official parliamentarian for the meeting. A substitute motion to the one held over from the previous meeting was made and seconded that it be required that membership in the HMA and the County Society be automatic, but membership in the AMA be optional. It was defeated. The previous motion was passed. The motion that membership be mandatory for all three organizations was then voted on and was passed by an overwhelming majority of the members present and voting. The nominating committee's report was presented and nominations accepted from the floor.

Approximately 215 members attended the annual meeting on December 2. The following new members were

continued page 244

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: LOUISE WULFF, MT(ASCP), University of Hawaii

James Yano Scores Again!

James Yano, immediate past president of H.S.M.T., received his MPH (Masters in Public Health) on December 21 at U.H. graduation ceremonies and on January 1 started a new career as administrative assistant at St. Francis Hospital. Those who know Jim are not really surprised at his stepping into this expanding field of administration, since his wide range of interests and years of laboratory administrative experience suit him admirably for this kind of work. He further prepared for his new field by doing his Master's work in Public Health Services Administration.



Jim, whose undergraduate days included a year at Boston College and graduation from the U.H., is, in a way, coming home, since he interned at St. Francis Hospital. Following graduation he went to Alton, Illinois, for five years where he managed the clinical lab at St. Joseph's Hospital from which he came to Kaiser Hospital in Honolulu in a similar capacity.

The internship program has lost one of its most dedicated teachers in this move of Jim's—his extra seminars and lectures kept the students at Kaiser interested, working hard, and aware of current changes in clinical job procedures.

Besides his career activities, Jim is a real family man and finds time to be on the Parent-Teacher Board of St. Louis High where son Stephen attends. He was president for a year of the St. Anthony's P.T.G. He has also been coach-manager of the Kainalu Little League. It must be this kind of sports activity (plus golfing) that keeps him fit for his other activities which include active participation in the Confraternity of Christian Doctrine, the Regional Medical Program, and of course, in H.S.M.T. Just what Jim's secret of constant and varied activity is, we can't say but it may have all started when he was very young, for he grew up with nine brothers and two sisters!

Jim's wife, Helen, teaches at St. Anthony's School besides caring for Stephen, aged fifteen, and Carla Anna, aged eight. Whether or not she helps Jim keep his strenuous schedule straight we couldn't find out, but Jim admits gratefully that an understanding wife is a tremendous asset for one with a busy career.

New \$2,000 Scholarship Created

Undergraduate students in their junior and senior years now have an opportunity to apply for a newly created scholarship program which will offer \$1,000 a year to the accepted recipient, according to Mr. Stavri Joseph, the Chairman of the Scholarship Committee of the ASMT Education & Research Fund, Inc. According to Mr. Joseph this scholarship has been created through the generous support of the Fisher Scientific Company.

Any applicant who meets the following general qualifications may make application for consideration:

- a. Is a permanent resident of the United States
- b. Is in need of financial assistance
- c. Has completed the first term of the sophomore year; and,
- d. Signs a statement of intent to earn a baccalaureate degree in medical technology in a program approved for this purpose by the Council on Medical Education of the American Medical Association. (Should the student change his major during his college or university career, the previous scholarship money will revert to a loan, repayable after

the student has completed his formal education and the remaining portion of the scholarship is forfeited.)

The application forms for the scholarship are available from the Executive Office of the Fund, Suite 1600, Hermann Professional Building, Houston, Texas 77025.

The deadline for applying for consideration is April 1, 1970.

Graduates from U.H. in December

The following students received BS degrees in Medical Technology from the University of Hawaii at the end of the fall semester.

Frank Bonilla-Linero
Shirley Hew
Wilma Loo
Laura Sorayama
Caroline Whately

Mr. Frank Bonilla-Linero, who interned at Tripler and is on active duty with the Air Force, is married and the father of a fine young man of

six. Frank has been attending classes at the University for several years in addition to his regular duties at the Hickam Dispensary. An outstanding student in his internship year, Frank contributed most helpfully to the teaching program and has been placed on the dean's list for his excellent record.

Shirley Hew, who interned at St. Francis, was also placed on the dean's list for her excellent grade point average during the fall semester.

Laura Sorayama interned at Queen's. Laura and the above two were 3 + 1 graduates.

Two registered Med Techs who finished their academic work for degrees were Mrs. Caroline Whately, working at Kuakini, and Wilma Loo, employed at St. Francis where she also interned. Mrs. Whately interned at Mercy Hospital in Vicksburg, Mississippi.

Two H.S.M.T. members received their Master's degrees at the same time. Miss Patricia Taylor, who earned an MS in microbiology, is on the staff of the Med Tech division at the University. Mr. James Yano earned an MPH (see feature article). ■



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Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 200.

(1) (b—one-stage prothrombin time)

The one-stage prothrombin time was the most useful test in predicting a fatal outcome. There were no survivors among patients with prothrombin times exceeding 20 sec. The highest serum bilirubin levels were recorded in the patients who died, but they were under 10 mg/100 ml in 40% of fatal cases. Over half of the serum transaminase activities were greater than 500 units; they were below 200 units in only two patients. The determination was of limited value in estimating the severity of the hepatitis. The range of transaminase activities was comparable in survivors and in patients who died. The serum alkaline phosphatase activities were also similar in survivors and nonsurvivors. Very high levels were found in two patients.

The white blood cell count was normal in 10 out of 19 cases in which it was recorded, and an absolute eosinophilia was noted in 9 out of 19 patients. Six of the patients with peripheral eosinophilia had normal white blood cell counts. (*Ann. Intern. Med.* Sept. 1969, p. 470, col. 1, para. 2)

(2) TRUE

The general conclusions were that a biochemical defect, resembling vitamin D deficiency or vitamin D resistance, was present early in chronic renal failure, and that secondary hyperparathyroidism was probably responsible also for the high phosphate clearance and the low inorganic phosphate level seen in the patients with mild renal failure. In unpublished observations, we have confirmed the findings of Friis et al. If the interpretation of these findings is correct, an elevated level of parathyroid hormone should be detected in the blood in early chronic renal failure. (*Arch. Intern. Med.* Sept. 1969, p. 264, col. 2, para. 1)

(3) FALSE

Transient hypercalcemia may occur if renal function is improved by conservative treatment, dialysis, or transplantation. This is due to a sudden reduction in the degree of resistance to PTH, and raises no theoretical problems. (*Arch. Intern. Med.* Sept. 1969, p. 271, col. 3, para. 3)

(4) TRUE

Pernicious anemia can be defined as vitamin B12 malabsorption due to inadequate secretion of intrinsic factor from gastric juice proved either by specific assay or by absorption studies using isotopically labeled vitamin B12. Histologic or secretory evidence of gastric mucosal atrophy supports this diagnosis. Megaloblastic erythropoiesis and neuropsychiatric dysfunction are eventual consequences of systemic vitamin B12 depletion, irrespective of its cause; they are not obligatory components of the basic disorder in pernicious anemia. (*Amer. J. Med.* Sept. 1969, p. 340, col. 1, para. 1)

(5) (d—none is better)

The effects of three forms of therapy, namely (1) antibiotics and nebulized bronchodilators, (2) intermittent positive pressure breathing (PBB) and (3) breathing exercises, were evaluated in three comparable groups of patients with chronic bronchitis and emphysema. None of the thirty-one subjects in the three groups had been treated previously with any form of therapy. The results of serial pulmonary function studies and clinical observations showed no difference in the response to the three forms of therapy. No group showed significant improvement. In general, there was slight deterioration in most measured functions, but the changes were very small with only a few attaining statistical significance. For all practical purposes function did not change significantly during the one year follow-up period, a result in accord with reported studies in which casually or intermittently treated patients were evaluated. It would therefore appear

that the three most commonly used forms of therapy do not influence the long-term course of chronic bronchitis and emphysema. (*Amer. J. Med.* Sept. 1969, p. 367, [Abstract])

(6) FALSE

The differential diagnosis of pulmonary hypertension includes (1) congenital heart disease with a left to right shunt leading to increased pulmonary blood flow; (2) pulmonary venous hypertension due to mitral stenosis, left ventricular failure or occlusion of pulmonary veins; (3) chronic obstructive pulmonary disease; (4) alveolar hypoventilation of other causes, namely, obesity, severe kyphoscoliosis or the "idiopathic hypoventilation syndrome"; (5) interstitial pulmonary fibrosis, as occurs in sarcoidosis, connective tissue diseases and the Hamman-Rich or idiopathic variety; and (6) primary diseases of the pulmonary arterial circulation such as pulmonary emboli, "primary pulmonary hypertension" and schistosomiasis. The first two categories are identified by cardiac findings, the third by severe airway obstruction, and the fourth by hypercapnia and hypoxemia. The diagnosis of diffuse pulmonary fibrosis is ordinarily based upon the roentgenographic appearance of the lung fields and, if all findings are negative, the diagnosis of multiple small pulmonary emboli or primary pulmonary hypertension is usually made by exclusion, often without confirmation by pulmonary angiogram or lung scan. However, it not infrequently occurs, as in our patient, that routine x-ray films of the chest may fail to reveal even severe pulmonary fibrosis. In such instances, pulmonary function tests may be of great value in differentiating between pulmonary fibrosis and pulmonary vascular disease in patients with pulmonary hypertension. (*Amer. J. Med.* Sept. 1969, p. 378, col. 1, para. 1)

(7) TRUE

Although the clinical significance of sodium fluoride in the treatment of Paget's disease has not yet been established, recent studies suggest that prolonged therapy with sodium fluoride in doses of 60 to 120 mg per day may prove beneficial.

Orally administered supplements of neutral sodium phosphate are currently being used to control the hypercalcemia associated with metabolic or metastatic disease. It is also generally agreed that phosphate alters bone turnover, although the exact mechanism remains unclear. Accordingly, phosphate therapy may prove beneficial during the osteolytic phase of Paget's disease, wherein bone turnover is pathologically accelerated and bone resorption predominates over formation. Since the use of intravenously administered phosphate carries a higher risk of extraskeletal calcification, orally administered phosphate therapy appears to be the treatment of choice when prolonged treatment is warranted. (*JAMA* Sept. 1, 1969, p. 1355, col. 2, para. 3)

(8) TRUE

A questionnaire sent to members of the American Electroencephalographic Society disclosed that of 1,665 patients reported to have isoelectric electroencephalograms there were only three with truly linear records who recovered some cerebral function. Two of these had barbiturate-induced coma and one had coma due to a meprobamate overdose. From correspondence with foreign colleagues and critical review of the literature and the questionnaires, the committee concluded that, except for anesthetic drug levels or hibernation, electrocerebral silence together with the neurologic characteristics of unreactive coma, absence of striated muscle activity, and total absence of reflexes is strong presumptive evidence of irreversible coma (cerebral death). Opinions differ as to the time limit for reversibility in relation to different causes; 24 hours was usually accepted. Technical recommendations stressed use of the increased instrumental sensitivity. (*JAMA* Sept. 8, 1969, p. 1505, col. 1 [Abstract])

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**Hawaii Academy of
 General Practice** *continued from 225*

ment and committees to which he is assigned, serve in the emergency room within his field, and attend all quarterly meetings unless excused for cause by the Credentials Committee chairman.

Active: A member granted Active Staff status is permitted to hold office and to vote. The requirements of participation are eased slightly, allowing him to attend only 50% of the quarterly staff meetings and 50% of departmental meetings. Attendance at assigned committee meetings is mandatory, however, and excuses must be for cause and validated by the chief of staff; attendance on the emergency room roster will be considered in similar fashion. His permission to admit or care for patients may be curtailed not only if chart work is in arrears, but also for failure to participate. No work—no privileges. An Active Staff member is one no longer on probation; he may have his “operating privileges” delineated, or he may go “under observation” for such privileges or for additional privileges as applied for, without losing his Active status. If a Provisional member fails to qualify for Active status at the end of his probationary year, he may be dropped from the medical staff. An Active may similarly lose his privileges for failure to participate.

Courtesy or Consultant: A prospective member wishing only to treat an occasional (emergency) patient in this hospital, or to be called in as a consultant or operating surgeon, must have his application screened as for a Provisional staff member; his operating privileges will be defined and specified in similar fashion; he will be on probation the first year, or longer if necessary, with or without observation. He may use the outpatient and emergency room facilities, but he may not admit patients other than as stipulated above. He may perform surgery as a consultant, but may not assume direct management of the

patient. He would be welcomed to serve in committees, attend meetings, and serve on the emergency room roster, but he would not be able to hold an office or vote. His intention to admit or treat more than just the occasional case would require him to apply for Active status and to become a Provisional member with all the attendant requirements, until such time as Active status is granted.

Honorary: Standards of requirement as usual, described in most bylaws. ■

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MEMBER



Committee, Dr. Uehara, Dr. Goto, and Mr. Clesson Chikasuye.

ACTION:

It was moved and seconded to delete the last half of recommendaiton No. 1. The motion was defeated.

There was considerable discussion and it was suggested that the Council be polled since they are supposedly representatives of the HMA membership. The poll showed seven members in favor of the recommendation No. 1 and three opposing it.

ACTION:

It was voted to approve recommendation No. 1. There were two votes opposing the recommendation.

It was voted to approve recommendation No. 2.

It was voted to approve the report of the Commission on Legislation.

Commission on Medical Services: The Commission had two recommendations as follows: (1) The Commission wishes to bring to the Council's attention that various committees are contacting HMSA for information and guidance. This being somewhat contrary to the past position of the HMA, the Council is asked to express its opinion; and (2) as was mentioned above, the Commission asks that the Council express an opinion regarding HMA's providing peer review for other insurance carriers and its now offering to provide this to the Department of Labor, and the statement that what HMSA really would like from HMA would be for the HMA to handle review of HMSA claims.

There was considerable discussion about whether or not HMSA's profiles are really true profiles of the medical community. The Council was made aware that the House of Representatives subpoenaed statistical data from HMSA's usual-and-customary program for specific categories of service rendered by physicians. The data did not include any individual profiles. It was noted that Aetna was asked if they could release statistical data and HMA was advised this could not be done because of regulations under the Social Security Act. It was thought that perhaps Mr. Hasegawa, Director of the Department of Labor, could obtain the statistical data from the Legislature for the Workmen's Compensation fee schedule.

ACTION:

It was voted that the Workmen's Compensation Committee inform the Department of Labor that HMA approves the principle of establishing fees on a usual, customary, and reasonable basis; that the definition of these terms be that as defined by the HMA House of Delegates; and that fees based on profiles for providers and physieians be true profiles.

It was voted to refer recommendation No. 2 to the Medical Care Plans Committee for further review and study.

It was voted to approve the Commission on Medical Services' report as amended.

There was considerable discussion about negotiations with the Department of Social Services, and the DSS's method of payment for services rendered. It was felt that it is about time that a confrontation be had. It was stated that Maui County Medical Society members were told that they would have to take assignments in order to be paid, otherwise physicians' claims will just be piled up. Dr. Mills stated that he will write Mr. Among for a meeting to have discussions and to inform DSS that if we do not hear from them, we would like to inform the members of HMA what has transpired to date and that when billing DSS they might receive 5.0 or less.

It was noted that Mr. Thorson and Miss McCaslin met with the DSS representatives at the Ombudsman's office. It was suggested that the Maui situation be brought before the Ombudsman if nothing is resolved at the meeting with DSS people.

Commission on Public Health: The Commission had one recommendation as follows: (1) That the Council permit Dr. Mills, Dr. Goto, and Dr. Sia to continue to defer asking for an appointment with the Governor to discuss the Molokai and Kona family planning centers.

ACTION:

It was voted to approve this recommendation.

Special report by Dr. John R. Stephenson: Dr. Stephenson reported that the ad hoc committee on drug abuse proposed cosponsoring, in conjunction with the American Social Health Association, a seminar on drug abuse to be held on January 17 and 18, 1970, at the Ilikai Hotel. He asked the Council for approval.

ACTION:

It was voted that the HMA assume the sponsorship of this seminar and that the HMA membership be urged to attend.

Dr. Stephenson read two proposed position statements for Council approval and presented them for the records: (1) A position statement by HMA on drug abuse, and (2) a position statement on smoking in schools.

ACTION:

It was voted that the position statement on drug abuse be adopted, Drs. Batten and Iaconetti opposed the statement.

It was voted that the HMA not adopt this position statement on smoking on school premises.

Special report by Dr. Francis Ikezaki: Dr. Ikezaki asked the Council's approval to survey Hawaii high school students for glycosuria. There would be no financial output necessary by the HMA. The American Diabetes Association and Squibb will provide the DryPaks.

ACTION:

It was voted to approve this request.

Dr. Iaconetti asked that the portion of the Commission's report relating to midwifery on Maui be deleted.

ACTION:

It was voted that the Council inform the Department of Health that Maui County Medical Society is not in any way interested in future courses on midwifery.

Commission on Interprofessional and Public Relations: The Commission had one recommendation: The Public Relations Committee recommends endorsement of the policy adopted by the AMA House of Delegates relative to medical care being a right rather than a privilege. "That the House of Delegates reaffirm its position that (a) it is a basic right of every citizen to have available to him adequate health care; (b) it is a basic right of every citizen to have free choice of physician and institution in obtaining medical care; and (c) the medical profession, using all means at its disposal, should endeavor to make medical care available to each person."

ACTION:

It was voted to approve this recommendation.

At the last Council meeting several questions came up regarding the over-all budget for the Health Careers Day program. At that time Council suggested that the Careers Committee work out the details and report back to the Council. The answer of the committee's chairman to these questions was submitted to the Council. There was dis-

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cussion about the protocol for Health Careers activities. The chairman states that the Health Careers Committee requests the Council of HMA to specify the degree of its commitment to year-round health careers activities. Specifically, they feel that one professional employee, an office with telephone, and equipment and supplies would be the minimum commitment that the Health Careers Committee feels could do the job. This set-up would enable HMA to work in conjunction with Department of Education in coordinating community resources related to health careers and the high school and college programs related to vocational counseling.

ACTION:

It was voted that the employee as mentioned in the Health Careers Committee's request be a member of the HMA staff who would be under the direct supervision of the committee.

It was voted that the Health Careers Committee spell out the details of finances.

Report of the Bureau of Research and Planning: Dr. Richard Mamiya gave further details on the status of Dr. Payne's study. The grant request was submitted on December 1 to the Health Facility Research and Development Branch of the USPHS. It is expected that an answer will be received in one or two weeks as to whether or not funds will be available. The fiscal agent, or grantee, will be the University of Michigan. Dr. Payne, his family, and five staff members from the University of Michigan are expected to arrive in Hawaii in February or March. They plan to collect data over a four-month period. Dr. Payne has asked for an Advisory Committee to work with him while he is here.

ACTION:

It was voted to approve the Bureau of Research and Planning report as circulated.

Report of the Finance Committee: The Committee made three recommendations: (1) That the Finance Committee go ahead with plans to file for 501(c) (3) status for the PBF if favorable rulings are received. (2) That trip insurance be secured for persons traveling on behalf of or at the request of the HMA on an individual basis in the amounts of \$100,000 for members, and \$50,000 for nonmembers and the Executive Secretary, and that in the case of the Executive Secretary, the HMA be named beneficiary. (3) That no further action be taken on the OCHAMPUS request, and that if further requests are received, they be referred to legal counsel for reply.

It was reported by the Chairman of the Finance Committee that an IRS ruling on the PBF had not yet been received.

ACTION:

It was voted to discuss recommendation No. 1 at the next Council meeting.

It was voted to approve recommendations No. 2 and 3.

REPORT OF THE SECRETARY

The secretary's recommendation: (1) That all roster changes reported by the counties for the months of September and October be accepted and approved.

ACTION:

It was voted to approve the recommendation. It was voted to approve retired membership status in the HMA for Drs. George Oakley and Robert Miyamoto.

It was noted that this request should originate from their county medical society.

REPORT OF THE TREASURER

The treasurer recommended: (1) That this report be accepted and placed on file subject to audit. (2) That members who do not receive copies of the Roster be given one copy free of charge if they so request. (3) That free subscriptions to the JOURNAL for Drs. Miyamoto and Oakley be extended on an annual basis. (4) That the Council make some arrangement whereby the neighbor island Councillors will not be out of pocket for expenses incurred in attending Council meetings.

ACTION:

It was voted to approve recommendations No. 1, 2, and 3.

It was voted that HMA allow neighbor island councillors to provide their own transportation and that they be reimbursed retroactive to the July meeting.

COMMUNICATIONS NOT REQUIRING ACTION

Letter from HMSA: A letter dated October 27 was received from HMSA advising the HMA that they were subpoenaed to release statistical data to the House of Representatives on their usual and customary program for specific categories of service rendered by physicians.

COMMUNICATIONS REQUIRING ACTION

Request from Bank of Hawaii Charge Plan: The Bank of Hawaii has requested an opportunity to submit their Charge Plan Merchant Member Proposal for consideration and review. The Bank of Hawaii feels that by providing this service to patients, it will give them an opportunity to have the means of paying their medical expense to their respective doctors. The Council was made aware of the Judicial Council Opinions and Reports of AMA in regard to Bank Cards.

ACTION:

It was voted that the HMA write the Bank of Hawaii using the Judicial Council Opinions and Reports of AMA as a basis for the reply and state that the HMA supports that opinion, and that this report be circulated to the HMA membership.

It was reported that there is a group of physicians who already utilize this charge account plan. It was suggested that the business manager of this group be advised of the AMA's Judicial Council Opinions.

HMA/HBA Tour to Europe: A letter was received from the International Travel Service extending an invitation to members of the HMA to join the Hawaii Bar Association on a deluxe charter flight to Europe via World Airways Boeing 707.

ACTION:

It was voted to refer this matter to the county medical societies and let them take action on it.*

UNFINISHED BUSINESS

Reply from HCMS: A reply from HCMS regarding guidelines for development by an ad hoc committee was circulated to the Council. The Council felt the guidelines were quite acceptable.

ACTION:

It was voted to accept the guidelines as circulated.

Scheduling of Council Meetings: A recap of the vote for scheduling Council meetings other than on a Sunday was noted. After considerable discussion it was suggested to move the meeting to another day.

* Subsequently the officers voted to accept the offer.

ACTION:

It was voted to hold the next Council Meeting on Friday, February 6, 1970, at 5:00 p.m.

There was discussion about allowing per diem for councillors and Mrs. Moran who attend this meeting.

ACTION:

It was voted to allow per diem for councillors and Mrs. Moran for the meeting of February 6, 1970.

NEW BUSINESS

Election of Officers to the Community Research Bureau: Sitting as members of the Community Research Bureau, the following were elected to office: President, B. A. Richardson, M.D.; Vice President, O. D. Pinkerton, M.D.; Secretary, Sakae Uehara, M.D.; and Treasurer, Herbert Y. H. Chinn.

Review of Cancer Commission: After considerable discussion on the memorandum from Dr. Mills, it was recommended to amend it as follows: Leave one and two as is; delete all of number three; delete (a) of number four; in number five add to end of sentence under (a) "or at the discretion of the President," and add under (b) "presented to the granting body and to the Cancer. . . ."

Proposed Meeting of County Presidents: Dr. Mills reported that he plans to have a meeting with the county presidents to develop cohesiveness for the future. He stated that since not all county presidents attend the Council meetings he felt it is necessary to have such a meeting. HMA could probably pay for their transportation out of the President's contingency fund.

ACTION:

It was voted to remind each president of the component societies that he is expected to attend the proposed meeting and in the event it is impossible, that the President-Elect be sent in his place.

Report of AMA Delegate: Dr. Mills reported on the highlights of the AMA Clinical Meeting in Denver. A copy of his complete report will be circulated to the members of the Council.

Temporary Disability Insurance for HMA Members: Mr. Garrett Chan of Indemnity Insurance Company reported on the temporary disability insurance program they have presented to the HMA. The Council was informed that this information had been circulated to the HMA membership and the Council is requested to take action on Indemnity Insurance's plan.

ACTION:

It was voted to accept Indemnity Insurance's plan on TDI.

The Council is also requested to take action on whether or not the HMA staff should have deducted from their payroll part of the TDI.

ACTION:

It was voted that the HMA assume the responsibility of the premiums for the employees.

Assignment of Matters Pertaining to Environmental Health: Dr. Mills reported that Dr. Alfred Morris had agreed to serve in this area. This matter came about because of the material being accumulated on environmental health, and because there is no committee really involved with the subject.

ACTION:

It was voted that an ad hoc committee on environmental health be appointed and that the Bylaws Committee be instructed to prepare revisions in the Bylaws to include current committees to be members of this committee.

Comprehensive Health Planning Chandler Meeting: It was noted that five individuals attended this meeting in

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Hawaii Medical Ass'n continued from 243

Arizona and the reports of four were circulated to the Council. The reports were reviewed and noted.

Miscellaneous: It was noted that correspondence was received from the Woman's Auxiliary of SAMA asking if the HMA would consider donating \$15 for sustaining membership. It was pointed out by Mrs. Moran that the W/A to HMA does belong to the W/A to SAMA and gives them a donation.

ACTION:

It was voted that HMA subscribe to this request and that it be routed through the President of the W/A to HMA.

Bard's Catheter Kits: Dr. Mills announced that word has been received from the FDA that all Bard Catheter Kits are being recalled.

Special Meeting: Dr. Mills stated that when the Peat Marwick Mitchell report is received, and after the meeting with the Department of Social Services, a special meeting of the Council will be called.

ADJOURNMENT

The meeting adjourned at 3:15 P.M.

R. VARIAN SLOAN, M.D.
Secretary

County Society News continued from 234

introduced: Walter W. Y. Chang, Theodore Chun, Garth Y. Morimoto, and Hideo Namiki. The Chair announced that there would be no increase in dues for 1970. Dr. L. Q. Pang told of the need for additional financing for the Library and extended an invitation to the membership to attend the Library's annual meeting on December 30. Robert Mytinger, Ph.D., asked for the doctors' cooperation and assistance as members of a review team needed for his one-day level-of-care study. The annual report of the Woman's Auxiliary was given by the outgoing president, Mrs. Donald Jones. Outgoing president K. S. Tom made a brief speech and accepted a plaque in recognition of his leadership.

Election results were announced as follows: President-elect, Thomas P. Frissell; Secretary, William F. Moore, Jr.; Treasurer, William W. L. Dang; Board of Governors, Douglas B. Bell, II, Max Botticelli, Hing Hua Chun, Andrew L. Morgan, and Niall M. Scully; Alternate Board of Governors, Albert Chun Hoon, John A. Krieger, Michael M. Okihiro, and Patrick J. Walsh; Board of Censors, K. S. Tom; Medical Practice Committee, Ann B. Catts, Frederick A. Dodge, and Bernard W. D. Fong; Nominating Committee, Reginald C. S. Ho and R. Varian Sloan; Delegates to HMA, Bernard W. D. Fong, George Ewing, Max Botticelli, Robert A. Rose, Gordon Liu, Walter H. K. Watt, Alfred Morris, Gail G. L. Li, and William Goebert, Jr. Alternate HMA Delegate election results were not announced. Dr. O. D. Pinkerton installed the new officers.

Notes & News continued from 233

remarked that the liberalized bill will fail because Catholic conscience will not permit it and the alternative will be no change in the law at all. To avert a complete void, however, there will be a law written so that abortion can be done only by qualified physicians and strictly in a hospital setting "so that utter chaos will not reign."

We witnessed Abraham Kagan of the Honolulu Heart Program greet Fred Shepard of the Rehab Center in front of Kuakini Hospital, shortly after Fred had interviewed an elderly Japanese male with a stroke. "What brings you here?" asked Abe and Fred replied, "Confused vascular assessment," raising his hands in a gesture of utter futility. Believing this to be some new neuropsychiatric entity, we fell neatly into the trap by asking

what it was. Fred, grinning like a Cheshire cat, informed us that this was his own interpretation for "CVA."

Quiet Frank Fukunaga, who has that strange Chinese incantation "Ah Shit . . . Ah Shit" for poorly hit golf shots, now talks to the ball. He is often heard saying, "Come back, ball, you're forgiven," or "Hey ball, I didn't mean it that way. . . ." We note that Frank is shrewdly and diligently working to raise his handicap for the forthcoming HMA and DDD tournaments.

While we gladly warmed under hot showers after being drenched in a sudden freezing squall one December Saturday afternoon, Glenn Kokame remarked, "Shucks, I didn't have time to use my Kahuna." When asked to elaborate, Glen explained that he stops rain by placing a small stone on top of three piled rocks, and spitting on it. We thanked Glenn for this information, and he offered a rain Kahuna, for which one picks a lehua blossom.

Big game hunter Richard Chang, who has been on several Alaskan safaris, went on a fishing safari to Kona last year, where he successfully latched onto a 150-lb. marlin. The precious fish was carefully mounted and now hangs in his office where it peers down with baleful eye at all who come within his ken.

Gaunt, chronic hacker Akira Kutsunai, who was for many years a relentless 2½-packer, suddenly stopped 3 months, 16 days, and 10 hours ago. He lost his hack and added several inches to his midriff. "It seemed like a good idea," he replied to our inquiry, but later admitted that the clincher was when his kids kept bringing home anti-smoking literature for their dad.

When we offered our sympathies to a relaxed and corpulent Dudley Seto, fresh out of uniform and back in private practice, we were surprised to learn that his wife Carol was ecstatically happy when he was drafted because she formerly seldom got to seem him before 9 or 10 in the evening. She even tried to persuade him to extend his army tenure.

Professional Moves

The Oriental Zodiac says the Year of the Dog is with us, but we are still catching up with announcements from last year. In October, Fred Shepard announced that the Rehabilitation Center of Hawaii will be known hereafter as the Pacific Institute of Rehabilitation Medicine. Fred writes, "This change, after sixteen years, reflects the broad scope of care provided by our facility to service the citizens of this State, individuals from the Pacific basin, as well as individuals from various parts of the mainland requiring a comprehensive physical restoration program under medical supervision." Also in October, internist Quintin L. Uy, formerly with Kaiser, opened his office at 2065 So. King St. On the Big Island in Hilo, internist DeWitt Hendee Smith opened at 321 Kinoole St.; Tokuso Tauiguchi returned from the mainland and resumed his practice at 97 Haili St.; and in Kona, Ob Gyn man Peter Alan Fleming associated with Kona Medical Associates. On Maui, orthoped Michael McDonald opened at the 858 Front Street, Lahaina, and on Kauai, David Sears resigned as State psychiatrist to enter private practice at the Wilcox Hospital Outpatient Clinic, becoming Kauai's first private psychiatrist.

In November, we find general surgeon Keith F. O. Kuhlman, fully recovered from his MI, relocating to the Windward Medical Center, and Carl W. Boyer opening his practice in therapeutic radiology at 1301 Punchbowl Street. Happiness for some is simply being out of uniform, for we met a smiling Charman Akina, fresh from the wars, relaxed and reaffiliated with the Honolulu Medical Group. On Kauai, W. J. McLaughlin joined the Kauai Medical Group and will staff the Koloa Branch Office. Also in November, Ob Gyn man Leonard Brooks, who formerly practiced in Indiana, was named clinical director of the maternity and infant care project in the Maternal and Child Health Branch of the State Department of Health. (These Health Dept. titles get rather long winded so we suggest it be abbreviated to MICH MCHB SDH Oh, well, it was a thought, anyway)

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Sportsmen

Turf Diggers: In October, at the WCC, **Kiku Kuramoto** tied in B flight stableford, **Allan Leong** won A flight stableford and **R. K. Chun** tied in B flight. **Tom Fujiwara** and **R. K. Chun** tied in B flight while **Bill Ito** topped C flight. **Toru Nishigaya** who appears fully recovered from his recent MI was back in winning form for he won in C flight medal and teamed with **Tom Min** to win team medal. Toru continued his winning form by coming in on B flight club medal. **Paul Tamura**, who plays with a ridiculous 15 handicap (computer error, no doubt), won B flight medal. Shot maker **Sam Yee** shot a 77-9-68 to win in A flight. At Mid Pac, **Albert Chun-Hoon** won B flight in match vs. par, while **Phil Chu** and partner won team best ball.

In November, **Toots Fujii** took B flight in match vs. par and **Toots** and **Roy Tanoue** won team medal. **Mac Mitsuda** tied for A flight with 80-10-70. Team low was won by **Paul Tamura** and **Al Ito**. At Mid Pac, **Mike Okilhiro** and partner, **Hideo Oshiro**, and **Don Marnyama** and another team were deadlocked for team best ball with 61's. Back at WCC, **Sam Yee** and partner took team medal, and **Kiku Kuramoto** tied for blind bogey with 80's.

In December, **Toru Nishigaya** and partner took team honors in stableford, Toru again topped B flight medal. **Richard Chun** won in B flight match vs. par, **Bill Ito** took C flight, **Kiku Kuramoto** and partner shared team honors with **Paul Tamura** and partner. At Mid Pac, **Walter Ozawa** and partner and **Albert Chun** and partner tied in team best ball. Again **Walter Ozawa** tied for Mid Pac Club Ace with an 83-17-66. **Walter and Catalina Chachero** tied in B flight with 53's.

Swabbies: In October, **Jack Watson** won the La Mariana Sailing Club race in his Cal 28. In the Waikiki Yacht Club's Commodore's Cruise invitational, **Ehuars Bitte** and **Mel Levin's Calypso** ("a yellow 27-foot sloop,

ghosting with every puff") won first over-all and Class B, while **Ells Harris'** *Premiere* was in 3rd, over-all. Again in the Duke Kahanamoku Regatta off Waikiki, **Mel Levin** in *Calypso* won Class B while **Ells Harris** was 5th in Class A. In November, **Jack Watson** was second in his Cal 28 in the La Mariana sailing club event. In the November Hawaii State Sailing championship (Yachting's Super Bowl) **Ells Harris** ("the sailing psychiatrist") and **Fred Shepard** represented Hawaii YC. Also in November, **Bob Rose** was 3rd in Cass III at the Kaneohe Yacht Club races (out of a field of three entries, we regretfully report).

Tennis: The Sunrise Swingers are resting from their early Sunday morning rigors after being clobbered in a recent round robin series with two other reputedly Class C teams. (But then someone has to win and someone lose, eh?).

Visiting Physicians

Fred Kern, professor of medicine and head of the division of gastroenterology at the University of Colorado Medical Center, and tennis bum, was visiting professor at Queen's from November to December. Fred, rotund faced with furrowed brow (we counted eight furrows), ready smile, thinning top, long sideburns, and occiput mop, is an excellent speaker, but he will be most remembered as the best tennis player of all the visiting professors to date. Besides his attributes as a tennis player, he gave par excellence lectures on gastroenterology. Fred describes peptic ulcers as "a mundane disease which costs a billion dollars a year Most of us, i.e., more than 50% of the population, have had ulcers at one time or another." Impatient general surgeon **Les Yee**, whose forte is to harass visiting professors of gastroenterology, asked, "When do you send a patient with gastric ulcer to the surgeon?" Fred was quite explicit in his criteria: "Our philosophy is to hospitalize

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PHYSICIANS and SURGEONS

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the patient immediately, gastroscopically, x-ray again in ten days to two weeks, and if there is no improvement in size or symptoms, send him to surgery." Re surgery for symptomatic hiatal hernia: "If you review the honest surgical series, there is a certain amount of recurrence of symptoms." During a discussion of ulcerative colitis, **Allan Leong** wondered, "Will a bypass without colectomy help?" The answer was to the point: "Absolutely not."

Robert Lawson was visiting professor at Children's Hospital and herein are some medical anecdotes contained in his stimulating lectures: During a discussion of fevers, he described the ECHO 9 virus as "The Pink Fanny Disease" because it causes a fine rash and fever. A southern elixir called "Save The Child" is given in so many drops per age group. "I like the honesty of the manufacturers, for the inscription at the bottom of the bottle says, 'If the baby does not take by mouth, it is equally efficacious rubbed on the chest.'" Bob quoted Osler as saying, "The desire to take medicine is the greatest feature which distinguishes man from animals." On the use of antibiotics, he says, "Antibiotics have no effect on viral diseases, but give symptomatic relief to the doctor. We should avoid using antibiotics as tranquilizers."

The visiting professor of surgery in November was **D. E. Strandness, Jr.**, chief of the peripheral vascular service at VA Hospital, Seattle, and associate professor of surgery at the University of Washington School of Medicine. D.E., a flat-topped, youngish, computer-brained lecturer who probably epitomizes the coming generation of physicians who are versatile in both physical and biological sciences, is at home in both surgery and physics. His lectures included "The Use of the Doppler Flowmeter in Peripheral Arterial Disease" and "Use of Plethysmography in the Clinical Evaluation of Patients." He lectured to overflow audiences, and when we met

pediatrician **Sharon Bintliff** at one of his lectures, we were convinced he was good.

Ivan Duff was visiting professor of medicine at St. Francis Hospital in December. This genial, medium-statured professor of medicine from Michigan Medical School has kindly, weatherbeaten features, speaks with a well-modulated voice, and covers tremendous ground without appearing to be rushed. He lectured on the various arthritides. As he described "psychogenic rheumatism" in "people who have a tendency to exaggerate, have hysterical personalities and manifest bizarre behaviors" and how tension gives rise to pain, soreness, and stiffness, we suddenly realized that he was describing our tennis elbow. In discussing steroid injections of tenosynovitis, esp. trigger fingers, Ivan admitted, "It is a frustrating experience for me, because I always feel like a quack and never know where the needle is."

Medicare Review Committee

One of the hazards of being chairman of a dinner meeting was well illustrated by **Gabe Ma**, who took over the reins from **Bill Dang**. Half way through the meeting with everyone finishing their steaks and lobsters, poor Gabe (who had been doing all the reviewing with nary a bite to eat) suddenly had to call a halt so he could gulp down a few morsels before proceeding. There ensued a lot of shop talk during the lull, such as how physicians are prohibited from charging insurance companies for care of their relatives. Someone mentioned how a neighbor island doc sent in a surgical fee to HMSA for doing a circumcision on himself, and was turned down. Another mentioned a physician who delivered his own wife because he wanted the best OB man in town and that was himself. While we were on circumcisions, **Vic Hay-Roe** told the story of the physician who did circumcisions on elephants. He was not complaining about the small fees, because tips were so

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dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN.

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Intracranial—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

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large. After reviewing the charges on an 80-year old who had multiple procedures done, **Tom Frissell** decided, "Heck, we should pay him for just plain guts." **Bill Dang** kidded **Bernie Fong** about a DDD tournament. After **Bernie** hit a fairway shot, **Bill** had to remind him to pick up his tee. Once on the green, just as **Bernie** was about to putt, **Bill** went up and offered him a tee. **Bernie** missed the ball completely. Despite the many unpleasant decisions, usually on the fees of a few mavericks, these meetings are usually fun.

Pediatric Pulmonary Symposium

We had hopefully attended the pediatric pulmonary symposium sponsored by RMP and KCH one evening in August at the Princess Kaiulani. Sparse topped, furrow browed, heavy set **William Silverman**, former visiting professor here from Columbia Medical School, gave a straightforward lecture in a rasping voice, sans jokes and slides, on all causes of neonatal obstruction starting with laryngeal anomalies, pulmonary anomalies, infections, aspiration syndromes, idiopathic respiratory distress syndromes, etc. (till we nearly suffocated). He certainly made the point that "the critical point with most respiratory ailments is within the first hour or hours after birth." **Constantine Falliers**, medical director of the Children's Asthma Research Institute and Hospital in Denver, was a more delightful speaker for he presented a striking appearance (rather like a close-cropped poodle) with fuzz both under his nose and on his chin and had a fascinating foreign accent. His presentation was replete with excellent slides and humor. He pointed out that asthma, hay fever, and other allergies account for 33% of all chronic disease conditions in children under 17, and that 23% of all days lost from school in this age group are due to asthma. He emphasized that many people do not realize that asthma varies in intensity and can be fatal. He related the story of a letter from a distraught parent reporting that his child had died of a mild attack of asthma. "Someone sarcastically commented that this was a mild death . . ."

Elected, Appointed, Honored

We congratulate affable **Dick Omura** on his uncontested election as president of the Honolulu County Medical Society. **Tom Frissell** is president-elect, **William F. Moore, Jr.**, secretary, and **Bill Dang**, treasurer. On the Board of Governors are **Doug Bell**, **Max Botticelli**, **Hing Hua Chnn**, **Andrew Morgan**, **Niall Scully**, **Albert Chun-Hoon**, **John Krieger**, **Mike Okilhiro**, and **Pat Walsh**. Newly elected neighbor island presidents are **George Brachier**, Hawaii; **Gonzalo Geroso**, Kauai; and **Sakae Uehara**, Maui.

Felix Lafferty is the new president of the Hawaii Academy of General Practice. **Fred Dodge** its president-elect, **James Erickson**, secretary, and **John Carson**, treasurer.

Deserving **Mort Berk** was presented with the distinguished service award of the Hawaii Rehabilitation Association at a recent annual dinner. **Mort** (whom his colleague **Unoji Goto** admiringly says would rather work than go on vacation) was cited for his efforts to help the handicapped as chief medical consultant for the Division of Vocational Rehabilitation and Services for the Blind. He has also assumed a new job, chairman of RMP's Heart Advisory Committee.

William F. Moore, Jr., who is serving his second term on the HMSA's board of directors, is the new president of the Western Conference of Prepaid Medical Service Plans, an organization of administrators and directors from 46 nonprofit medical plans in western U.S., Canada, and Hawaii.

Yone Mivashiro of Eleele, Kauai, was honored with a souvenir football at the Waimea High School football team victory luau recently for his many years of devoted service as team physician.

The Mayor nominated **Richard You** to the board of the Dept. of Parks and Recreation. **Howard Liljestrand**, who was interim president, is the new vice president of Hawaii Planned Parenthood, Inc., an organization which operates three clinics, plans three more, and provides families "the freedom of choice in determining the number and spacing of children and promotes the health and economic welfare of mothers and children in the family unit." **George Tyan** was elected treasurer of the FF (Flip Flop) Fraternity (a unique fun fraternity of Chinese students which has alumni chapters in New York, Boston, San Francisco, Chicago, Ann Arbor, and Honolulu) at their winter reunion at Waialae Country Club.

Gov. John Burns appointed **Jack Watson** and **Howard Honda** to the new Board of Hearing Aid Dealers and Fitters which was created by the 1969 legislative session.

We are proud that our HCMS ex-president **K. S. Tom** was recently awarded the Stritch Medal of Loyola University for "resourcefulness, dignity, benevolence, loyalty, and dedication" in medicine at a dinner in Chicago. He was honored along with space age heroes, Dr. Thomas Payne, head of NASA, and William Anders, an Apollo 8 astronaut. We learned that K.S. besides his many other attributes graduated from Loyola with honors, was one of the first American Army doctors to enter the Nazi concentration camp at Dachau during World War II, served as chief of OB at Kapiolani and St. Francis Hospitals, worked to establish the three-year residency program in obstetrics here, is a civilian consultant at Tripler, was a national consultant to the Surgeon General of the Air Force, and is an associate clinical professor at the U. of H. Medical School On the Tong front, **Joe Kam** was elected a property trustee of the Kam Society. **Cesar B. DeJesus** is a new board member of the Honolulu Symphony Society. **Diek Ando**, who represents the Honolulu district, was unanimously re-elected chairman of the State Board of Education at its annual election in Kahului, Maui.

Another Belated Report On the 2d Annual Kaiser Medical Center Symposium

The 2d Annual Kaiser Symposium was held at the Princess Kaiulani with a free buffet dinner thrown in. Though not so variegated as last year's buffet which was prepared by Kaiser's own dietary staff, it was nevertheless wholesome and in true Spencecliff tradition. Chief of Staff **Philip Chu** gave with the welcome spiel, and to illustrate how unpredictable the symposium can be, told the story of a slightly dazed man found in a bath tub by a rescue squad soon after his house had been destroyed by a buzz bomb during the Battle of Britain. He explained, "When I pulled the plug, all hell broke loose" The situation was certainly unpredictable, for when pediatrician **Alex Roth** tried to report on the results of rubella vaccine immunization, the microphone would feed back causing **Alex** to comment dryly, "I must have a very magnetic personality." **Alex** reported 97.6% seropositive results after the initial injection with the Merck Sharpe & Dohme vaccine in 1,530 children (ages one to ten) from 560 families, with essentially no side effects. Cardiologist **T. K. Lin** feels that "males are the weaker sex" since an analysis of 296 MI's in Hawaii over a 10-year period shows a 4:1 incidence of males to females. His figures show an incidence of 49.4% Caucasians, 14.2% part-Hawaiians, 12.8% Portuguese, 10.1% Japanese, 4.4% Chinese, 4.4% Filipinos, and 1.1% Koreans. There were 304 transmural infarctions, 46 nontransmural, and 15 combined infarctions. Mortality rate was 9.2% for a first MI and 27.0% for repeat MI's, giving an average 15% mortality.

Mits Yokoyama reported on a joint research project with **Michio Yamakido** and **Noboru Oishi** on ADP-induced platelet aggregation in normal and diseased groups. He reported no spontaneous platelet aggregation when 8% trisodium citrate was used as the anticoagulant; no significant day-to-day variation of platelet sensitivity

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to ADP when the individual was in a resting and fasting state; and that platelet sensitivity was increased in patients suffering from cerebral thrombosis, myocardial infarction, and diabetes mellitus.

Seymour Kety, professor of psychiatry at Harvard Medical School, spoke on biochemical substrates of the mental state. He told the story of the Texan visiting Israel who boasted to a native, "Why, I feel I can walk across your country in one day. When I go home, I can drive and drive and still be in Texas." The Israelite replied sympathetically, "You know, I used to have a car like that myself." Seymour says, "You can call some one a dim bulb" because the brain though only 2% of the total body weight utilizes the energy of a 20-watt bulb. In sleep, there is the same energy consumption as in the waking state and equal neurone activity, but only different circuits.

Jose M. R. Delgado, professor of physiology at Yale School of Medicine, feels that tiny electrical cerebral "pacemakers" called stimoceivers beneath the scalp may provide a link between man's brain and a computer so he can learn what is going on in his brain. Delgado feels that man should now focus on the development of his psyche. "We are civilized in our physical ecological accomplishments, but barbaric in our psychological responses." The stimoceivers stimulate and receive from various parts of the brain and could give clues as to what type of behavioral patterns are impending so that signals can be sent back to the brain and these behaviors altered or inhibited, e.g. in an epileptic.

Doctors In Print

Trisomy D in a Cyclops, J. Ped. v. 74-4, April, 1969, D. T. Arakaki and S. H. Waxman.

Lichen Planus, p. 612, Current Therapy, 1969, Harry L. Arnold, Jr., M.D.

NOTICES

NINTH NATIONAL CONFERENCE ON THERAPIES FOR ADVANCED CANCERS

August 20-22 (Thursday-Saturday), 1970, University of Wisconsin Post-Graduate Center.

Sponsor: Division of Clinical Oncology, University of Wisconsin.

Chairman: Fred J. Ansfield, M.D., Professor of Clinical Oncology.

Information from program coordinator: R. J. Samp, M.D., University Hospitals, Madison, Wisconsin 53706.

MEDICAL LIBRARIANS WORKSHOP AND MEDLARS SESSIONS TO BE HELD MARCH 11-13, 1970

A workshop for Medical Librarians, those operating or working in hospital or other medical type institution libraries, will be held March 11-13, 1970, at the Hawaii Medical Library, Inc., Honolulu. The workshop is being sponsored by the Pacific Southwest Regional Medical Library Service located at the University of California, Biomedical Library in Los Angeles.

In connection with the workshop two sessions on MEDLARS (Medical Literature Analysis and Retrieval System) will be given for all medical personnel. This is a computer-based system in operation at the National Library of Medicine and their designated libraries throughout the nation. These sessions will be Wednesday, March 11, 1970, 6-9 P.M. and Thursday, March 12, 1970, 1-4 P.M. Physicians are encouraged to attend.

Those interested in attending either the workshop or the MEDLARS sessions, may contact James H. Parrish, Medical Librarian, Hawaii Medical Library, Inc., 1221 Punchbowl Street, Honolulu, 96813, for further information. ■

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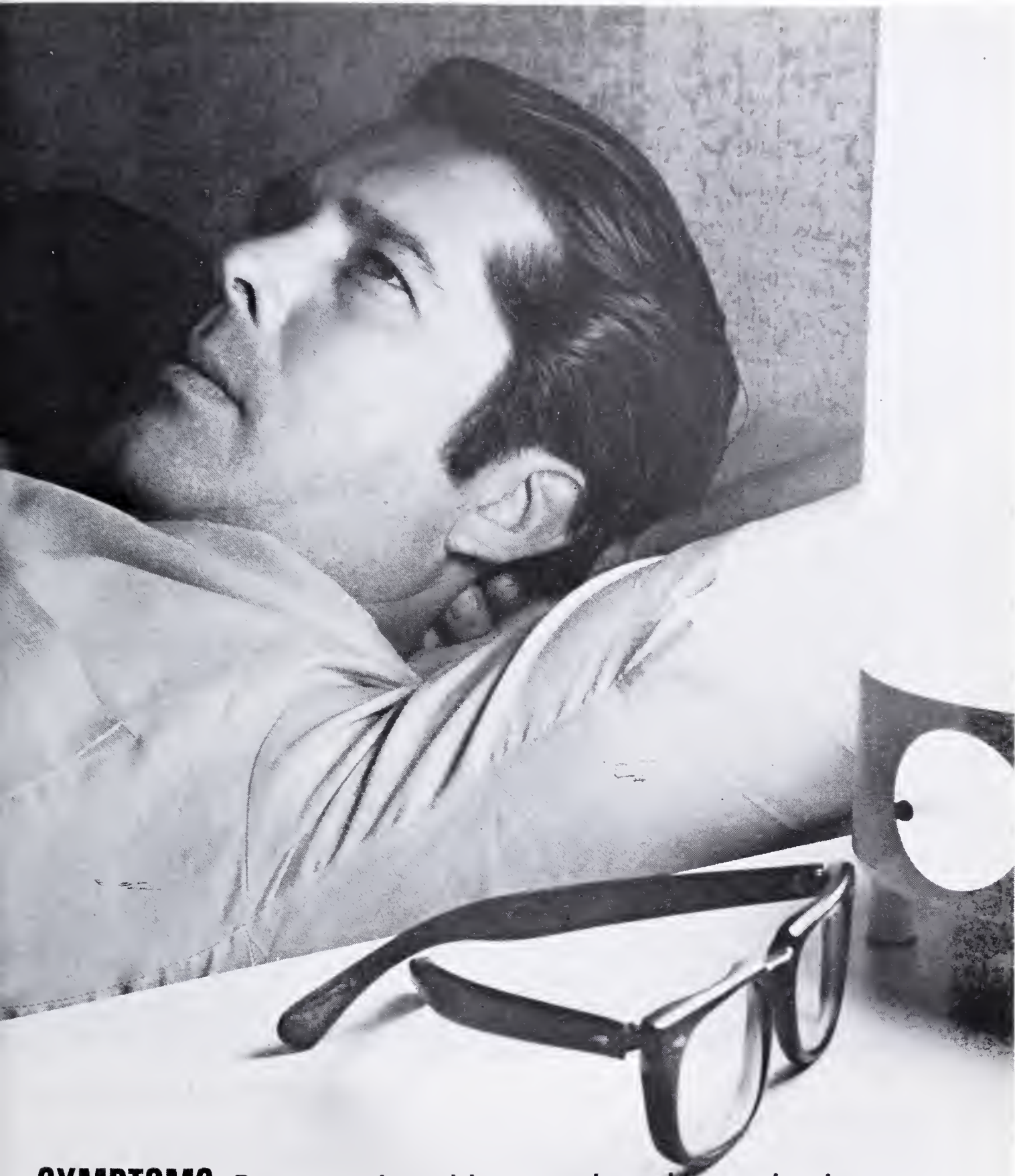
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which the teaching staff had been giving to radiologists and physicians for over forty years. Students in nuclear medicine unquestionably will also find this text very useful.

The subject matter ranges from the basic principles of the structure of the atom to the latest methods of radiation detection, scanning, and protection. If one has been out of touch with physics, and especially modern physics, he will no doubt find the reading somewhat difficult. However, in order to make the reading less formidable, the author has eliminated as much mathematics as possible. In fact, he has not included in the discussions any of the mathematical derivations which usually stop the average physician from proceeding further.

JUN-CH'UAN WANG, Ph.D., M.D.

Progress in Hematology, Vol. 6

Edited by Elmer B. Brown, M.D., and Carl V. Moore, M.D., 389 pp., \$16.75, Grune & Stratton, 1969.

THE 6TH VOLUME of this excellent series, first introduced in 1956 to provide reviews of basic advances and their clinical applications in hematology, contains 11 articles by experts in their fields on immunosuppression, hemolytic anemias, preservation and utilization of blood components, mechanism of thrombosis, intrinsic factor and other vitamin B12 transport proteins, control of hemoglobin synthesis, new tracer techniques in hematology, and clinical usefulness of iron-chelating agents. Each section is well written and comprehensive. Many references are given at the end of each section. This compact volume is recommended to anyone interested in keeping abreast of the newer advances in hematology.

ROBERT T. S. JIM, M.D.

Practical Psychiatry for the Internist

By Douglas Goldman, M.D., and George A. Ulett, M.D., Ph.D., 168 pp., \$9.85, The C. V. Mosby Company, 1968.

THE TITLE of this interesting book is misleading. Very little of it actually seems to be directed at the internist, but rather the general practitioner. Perhaps if I were a general practitioner, I would have found it more useful.

The work is presented in nine chapters, which go into human growth and biology, psychiatric aspects of surgical practice, psychosomatics, psychiatric disorders, general principles of treatment, psychopharmacology, hypnosis, and a philosophical discussion of the physician and his own emotional problems, and how they influence his treatment of patients.

The most useful part of the book is the chapter on psychopharmacology, which goes into the various psychopharmacological drugs and their usage.

W. H. SAGE, M.D.

Also Received

Adrenergic Neurotransmission Ciba Foundation Study Group #33

Edited by G. E. W. Wolstenholme and Maeve O'Connor, 119 pp., \$4.50, Little, Brown & Company, 1968.

AN EXCELLENT SYMPOSIUM regarding basic observations on an isolated physiologic mechanism which is proving to have greater clinical significance.

At Your Own Risk: The Case Against Chiropractic

By Ralph Lee Smith, 179 pp., \$4.95, Trident Press, New York, 1969.

THE "CASE" is well presented and documented. It is recommended for all members of the Legislative Committee for action and to fellow physicians who want some fundamental information about chiropractors.

★Introduction to Medical Science

By Clara Gene Young, technical editor and writer (Medical retired), Civil Service and James D. Barger, M.D., F.A.C.P., 295 pp., \$7.95, The C. V. Mosby Company, 1969.

THE PURPOSE of this text is to inform paramedical personnel regarding the pathogenesis of some major medical disorders. A gift of this text to your key paramedical personnel should be invaluable if the entire programmed instruction is studied.

Medical Supply in World War II

Medical Department, United States Army, Editor in Chief Colonel Robert S. Anderson, MC, USA, 662 pp., \$8.25, U.S. Government Printing Office, 1968.

AN EXCELLENT documentation of medical logistical problems and their solutions during World War II.

Lectures on the Comparative Pathology of Inflammation

By Elie Metchnikoff, 224 pp., \$2.75, Dover Publications, Inc., 1968.

A PAPERBACK translation of another medical classic for those interested in this field.

The Apologie and Treatise of Ambroise Paré

Edited and with an introduction by Geoffrey Keynes, M.D., F.R.C.S., F.R.C.O.G., 227 pp., \$2.50, Dover Publications, Inc., 1968.

THE 16TH CENTURY surgical writings of this "giant" in the history of surgery.

Medical Interviewing: A Programmed Manual

By Robert E. Froelich, M.D., and F. Marian Bishop, Ph.D., M.S.P.H., 116 pp., \$4.75, The C. V. Mosby Company, 1969.

ALTHOUGH INTENDED for teaching medical students, this programmed paperback stresses an important aspect of the art of medicine: patient-physician interaction.

The Actions and Uses of Drugs: Handbook of Pharmacology, 4th Ed.

By Windsor C. Cutting, M.D., 779 pp., \$7.95, Appleton-Century-Crofts, 1969.

A HANDY REFERENCE text for the house staff or busy practitioner who wants a ready source of information. Within the limits of all such synopses, it does provide a good review book on pharmacology.

Internal Medicine in World War II Infectious Diseases and General Medicine, Vol. 3

Editor in Chief, Colonel Robert S. Anderson, MC, USA, 778 pp., \$8.25, Office of the Surgeon General, Department of the Army, U.S. Government Printing Office, 1968.

THIS THIRD VOLUME on internal medicine in WW II is an excellent documentary of the multiple problems confronted by the medical corps in all parts of the world.

Organization and Administration of Health Care

By Richard L. Durbin, A.B., M.B.A., M.P.A., and W. Herbert Springall, A.B., M.P.H., 248 pp., \$9.85, The C. V. Mosby Company, 1969.

THESE TWO HOSPITAL administrators effectively present their "case" for health care considering regional needs and national demands. It is highly recommended for all hospital administrators, physicians on hospital boards, and for all others interested in this vitally current and pressing problem. ■

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Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.



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A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Actions—Ovulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain¹⁻³ leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates in the United States found relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives. This has not been confirmed in the United States.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for 2 months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives

—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values; metyrapone test and pregnanediol determination.

1. Royal College of General Practitioners: Oral Contraception and Thromboembolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967.
2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968.
3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969.
4. American Journal of Epidemiology (to be published).



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Contraindicated: Known hypersensitivity to the drug. Children under

6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective

amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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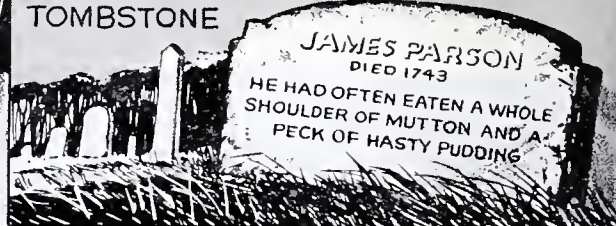
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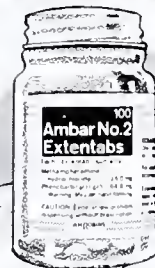
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WAS AWARE OF THE
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*Make less thy body hence
and more thy grace;
leave gormandizing;
know thy grave doth
gape for thee wider
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Literature on indications and dosage available on request.

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- (1) Siver, R. H.: CMD, 21:109, September 1954. (2) Frykman, H. H.: Minn. Med., 38:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., 51:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., 15:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., 58:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, 25:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., 20:591-593, November 1965.

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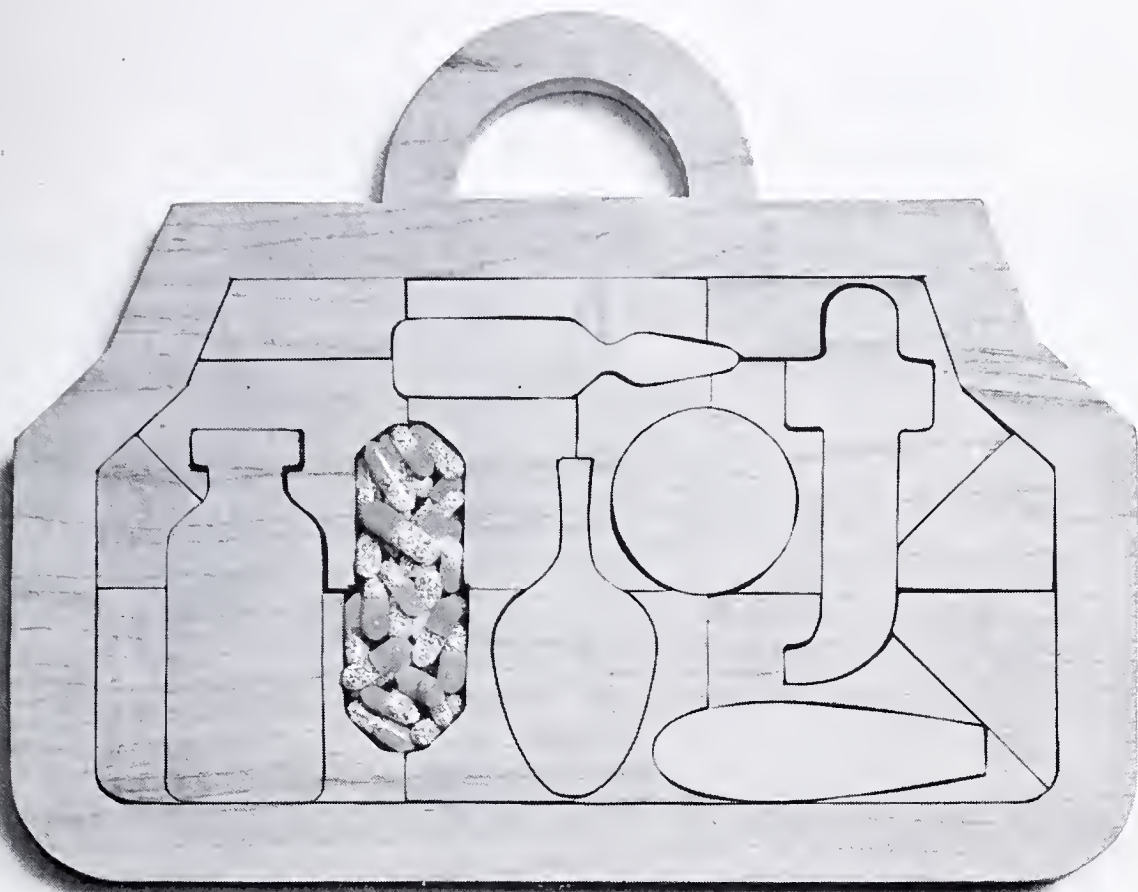
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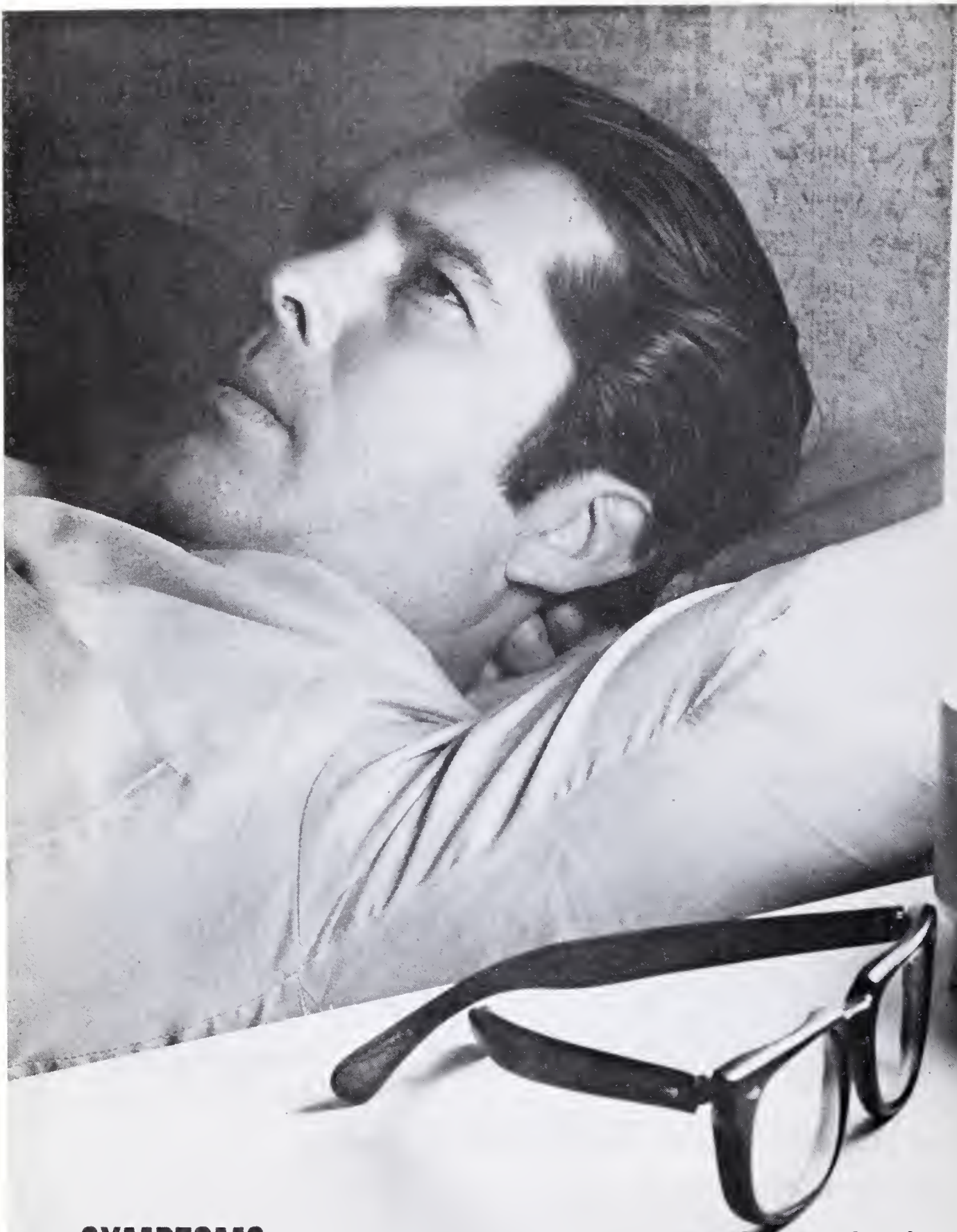
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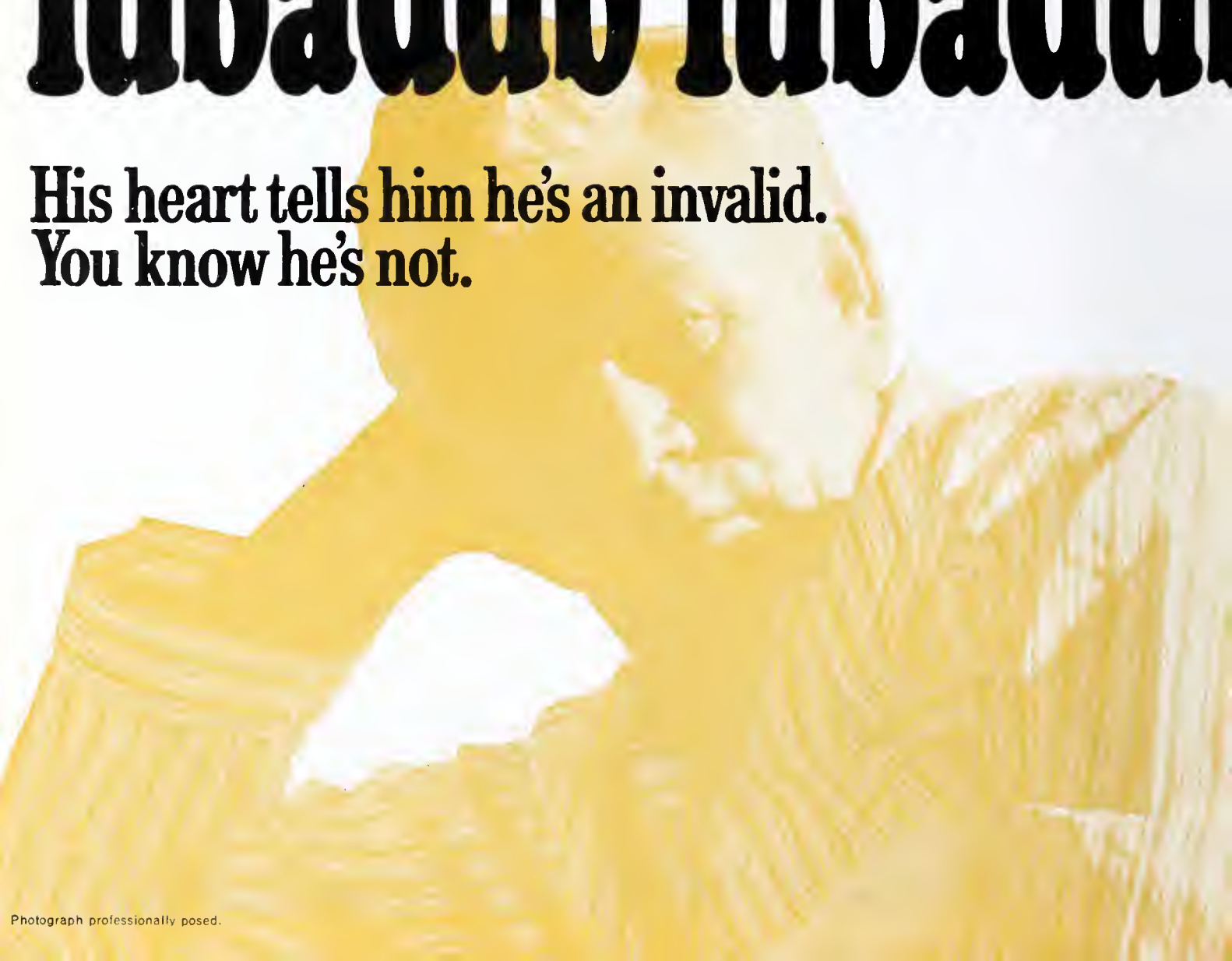
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Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis,

lbadubdub lubad

Anxiety is expected in the cardiovascular patient. A little may even be desirable.

But when anxiety is exaggerated . . . when it interferes with sleep . . . when it aggravates cardiovascular symptoms, your help may be needed.

Naturally, you'll want to reassure the patient.

And perhaps prescribe Equanil (meprobamate) as adjunctive therapy. It helps relieve anxiety and tension specifically, yet gently.

Almost 15 years' use has shown that Equanil is usually well tolerated as well as effective. Side effects are generally limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

Equanil®

(meprobamate)



Doctor, after all we've been through together...

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granuloma inguinale
listeriosis
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mixed bacterial
infection
osteomyelitis
otitis
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pharyngitis
pneumonia
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scarlet fever
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sinusitis
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tonsillitis
tularemia
typhus fever
urethritis

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we were on a first-name basis?

call me "Achro[®]V"



Every pharmacist knows ACHRO[®] V stands for ACHROMYCIN[®] V

Contraindications: Hypersensitivity to tetracycline.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Nonsusceptible organisms

may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative

dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN.

Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis.


Intracranial—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

Achromycin[®] V

Tetracycline



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Benylin[®] **EXPECTORANT**

Each fluidounce contains: 80 mg. Benadryl[®] (diphenhydramine hydrochloride), Parke-Davis; 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol. An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT is the leading cough preparation of its kind. BENYLIN EXPECTORANT tends to inhibit cough reflex... soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes BENYLIN EXPECTORANT easy to take.

PRECAUTIONS: Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with BENYLIN EXPECTORANT should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENYLIN EXPECTORANT.

ADVERSE REACTIONS: Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.

PACKAGING: Bottles of 4 oz., 16 oz., and 1 gal.

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PARKE-DAVIS



Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alkali formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastro-

intestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be

closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derma-

Sandy sails again! After an arthritic flare-up.

His rheumatoid arthritis flared out of aspirin control.
It meant weeks of pain, stiffness,
swelling and tenderness...and a lot of sun and wind that
somebody else took advantage of.

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short trial period
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usual dosage: 1 capsule q.i.d. initially, then 1 or 2 daily

Butazolidin[®] alka

100 mg. phenylbutazone
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150 mg. magnesium trisilicate

Serious side effects can occur.
Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings and contraindications. Read the prescribing information. It's summarized below.

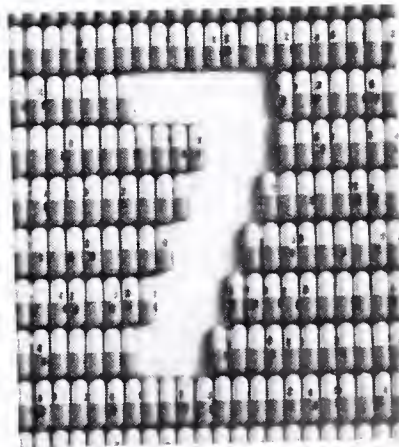
s. Stevens-Johnson syndrome, cell's syndrome (toxic necrotizing dermatitis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis and, rarely, salivary gland enlargement may require cessation of treatment. Such patients should not receive subsequent courses of the drug. Vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot

be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis:
Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week.

Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily. In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)46-070-C
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It is not in pleasure,
but in rest from pain.”**
John Dryden

**Give your patients
rest from pain**

**Empirin® Compound
with Codeine
Phosphate gr. 1/2, No. 3**

Each tablet contains: Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

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Tepanil[®] Ten-tab[®] (continuous release form) (diethylpropion hydrochloride)

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When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety,

and jitteriness. In contrast, CNS depression has been reported. In a few episodes an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in the evening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-006A / 1/70 / U.S. PATENT NO. 3,0



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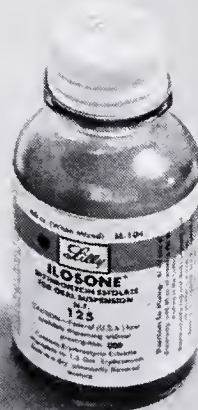
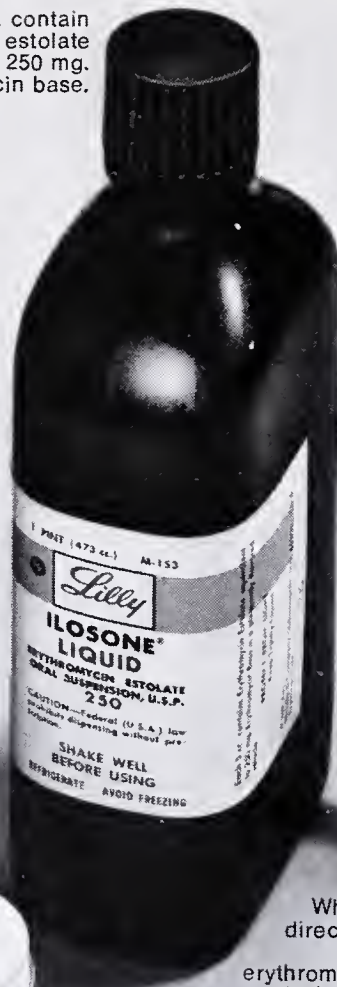
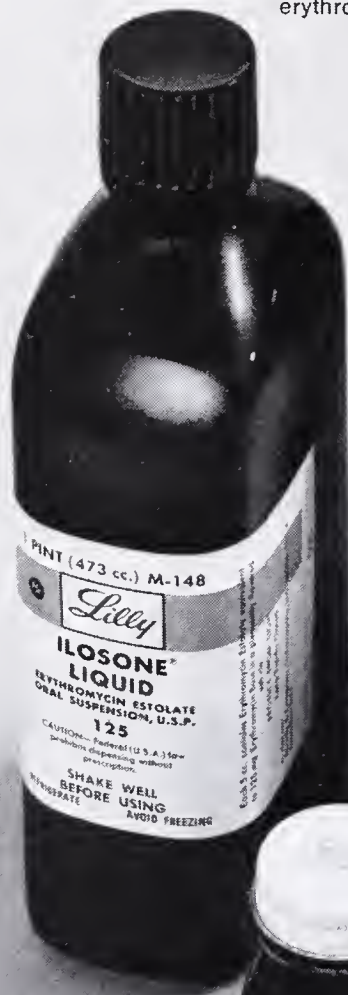
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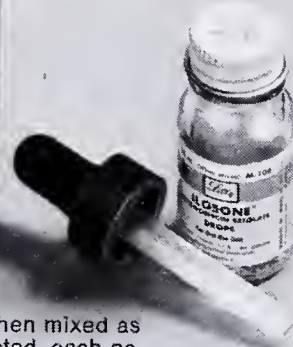
If, as Henry Brooks Adams speculated, "A teacher affects eternity; he can never tell where his influence stops", the outlook is optimistic.



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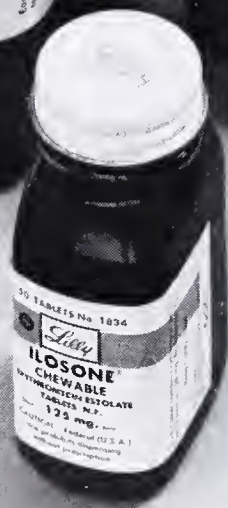


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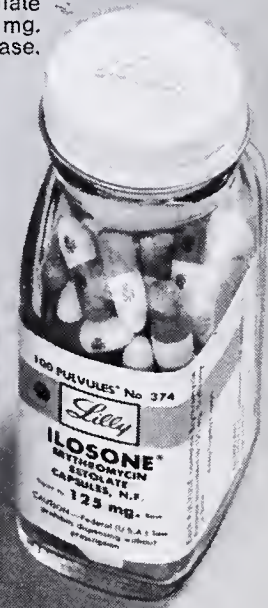
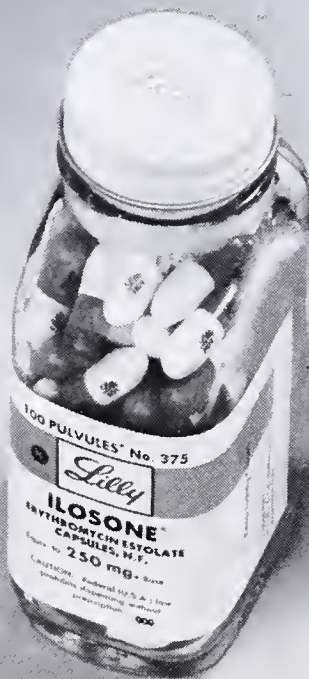


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Report

Medical Education in the Pacific

WINDSOR C. CUTTING, M.D.,* *Honolulu*

ONE MORNING in 1964 a man from Okinawa, representing USCAR, came into my office. I knew a little about Okinawa—that it was an island south of Japan where there was intense land fighting during World War II—but not much else. It turned out that USCAR meant the United States Civil Administration of the Ryukyus, the island chain stretching south from Japan to Taiwan.

Okinawa lies about 400 miles south of Japan, 400 miles north of Taiwan, and 400 miles east of mainland China. The visitor, Colonel Edward Dehne, said that USCAR was building a hospital for the Ryukyuan government on Okinawa in an effort to create an attractive place for young medical graduates from schools in Japan to continue their training. The reason for his visit was that he thought the University of Hawaii Medical School should conduct the educational program within the hospital.

As we looked into the problem, we found it exceedingly complicated. In our talks we dealt not only with USCAR, but with the U.S. Army in Okinawa, the U.S. Army in Hawaii, the Government of the Ryukyu Islands, the Government of Japan, the Okinawa Medical Association, and the large Okinawan community in Hawaii. After many trying months, and largely because of the skillful organizing of Dr. Neal Gault, we were able to set up an effective internship program with a faculty of ten physicians. Through the years the faculty has included teachers from Japan, Korea, Okinawa, and Canada, as well as from the United States. All have been board certified specialists with training in hospitals in the United States. The

first eight interns were somewhat reluctant to go to Okinawa, but by the end of their year's training, they had become enthusiastic over the program and five chose to remain as residents in specialty training. The training has now become much sought after, and currently there are 12 interns and 14 residents engaged in the program. It was particularly the bedside teaching, in the American style, that made the service so desirable to young Japanese-trained physicians. Another reason for the success of the program is undoubtedly the current widespread disruption of post-graduate medical training in Japan; but even when internships in Japan were current, they differed in being less patient-directed than in the United States.

In drawing a moral from the Okinawan experience, it is clear that we are helping to develop clinical medicine in Okinawa, but that Okinawa is for the Okinawans, and we are there only temporarily to help them get started. Our hope is that the University of the Ryukyus will in the near future be able to provide premedical and preclinical training for students, to which our clinical teaching machinery can be added, and the University of the Ryukyus will then have a complete medical school. It will clearly be their medical school, meaning that while we will hope to remain as helpful associates, we will soon have passed the stage of primary involvement. The moral, then, is: "One can serve usefully where he doesn't intend to stay."

While the Okinawa experience was being gathered, our own medical school got underway in Honolulu. Our goal was to serve the Pacific in medical education and research in every way possible.

* Dean, School of Medicine, University of Hawaii.
Read at the 11th Congress of the Pan-Pacific Surgical Association, Honolulu, October 26, 1969.

In research, this was fairly easy, as our faculty was deeply interested in research problems throughout the Pacific. Individuals or groups were soon doing work, and collecting data and materials for study in Samoa, Tahiti, the Cook Islands, the Philippines, Japan, and a number of other places.

The program of education in the Pacific was more difficult. When we looked at our accumulated experience we found that we had learned a great deal in Okinawa, and a great deal from graduate students in the basic science departments. There were some 35 of these students in the various medical school departments, working for the M.A. or the Ph.D. degree, from pretty much all over the Pacific and accessible Asia. Our student from the farthest point was a young man studying pharmacology who came from Kabul in Afghanistan. Lastly, we had medical students from Palau, American Samoa, Hong Kong, and Thailand, and we were beginning to understand some of the problems that these students faced.

An initial decision in education was to deal with medical students from the Pacific by the creation of a category called "Dean's Guests." In this classification, students with less than optimal preparation spend three or more years doing the two years' work presently offered in the medical school. This gives opportunity to go more slowly when some courses call for a background in which the student is not prepared, and for remedial work in general when preparation is deficient. While the "Dean's Guest" category is well adapted to younger students, it provides no solution for older students, particularly for able and ambitious "Medical Practitioners," as the graduates from the Fiji Medical School are called. One Fiji graduate decided to start all over again, as it were, as a freshman in our school, but for most this would mean going back too far.

At that time we really had no worthwhile plans in the field of intermediate level medical education, though we recognized that a great proportion of medical care in the Pacific was given by people with less than full medical training. The graduates of the Fiji Medical School in Suva get a diploma, rather than the medical degree, and include a few graduates in each class who approach the M.D. level, but with most being less well trained and less proficient.

In 1967 chance again threw experience in our path. The President of the University called to say that a new hospital, the Lyndon B. Johnson Tropical Medical Center, was being built in Pago Pago, American Samoa, and to ask if we would be interested in developing an affiliation with the hospital. The answer was a rather thoughtful "yes," because while we had become deeply in-

terested in the problems of the Pacific, we were thinly manned at home in Honolulu and were obviously concerned about starting too many things at once.

In Pago Pago we found seven American-trained physicians and 12 Fiji-trained physicians, there called Samoan Medical Practitioners. At first they were working in an old Navy hospital, but later moved to the beautiful, newly completed Medical Center. The physicians were busy rendering service to the slightly less than 30,000 people on Tutuila, the largest island of the group. We found that they had a number of desires. The American-trained physicians were there on two-year contracts, and wanted the usual opportunities for continuation education in the mainland United States or Hawaii. The Samoan Medical Practitioners yearned most for some means of acquiring the M.D. degree. They desired the greater scope and recognition that would be theirs if they could be considered fully trained doctors.

At the same time that we were learning the desires of the physicians in Samoa, we developed a desire of our own. In medical education one is always looking for better opportunities for the students. The wards in Pago Pago were filled with patients who, unfortunately perhaps for themselves, but fortunately for medical students, had many diseases in more pronounced and flagrant states than can often be seen in Honolulu, or the mainland. We wanted to have our students spend some time there.

For these reasons we began to study the possibilities for education in American Samoa. The mechanics of giving postgraduate education, or of having our students go to Samoa for a summer of experience, presented only the difficulty of money. The problem of the Samoan Medical Practitioners, however, was far less obvious of solution. Fairly extensive studies and travel were then undertaken to learn more about the medical school in Fiji and to get the advice of the faculty there and also in New Zealand, where some of the Fiji graduates go for continuation of their education. Lastly, conversations were held with a number of people with experience in various islands of the Pacific, and particularly with Dr. Peck, Health Administrator for the Trust Territory.

Our conclusion was that the Lyndon B. Johnson Tropical Medical Center should be used as a teaching hospital. The opportunities were altogether too great to think of its remaining as a provincial, service-only institution when it had much greater potentialities. We felt that if it could be staffed with a small number of teachers from the University of Hawaii School of Medicine, who would serve as counterparts to the staff physicians

already there, much as our faculty had related to the Ryukyuan staff in Okinawa, we would have a mechanism for teaching at any level desired. Our thought was that the teachers should stay in Samoa only six months, and then return to their regular posts in Honolulu, so that we could attract and interest highly experienced teachers. We had learned in Okinawa that the ordinary two-year tenure was more than most academic people were willing to spend away from their home base. Our hope was also that this more rapid rotation of teachers would familiarize all the faculty in time with the opportunities in Samoa, and that many of them might be attracted by research problems that could be developed there, or in similar islands.

Of the various teaching levels, it seemed that we could be of greatest service if we could provide appropriate further education for Fiji graduates. While some stay in Fiji, or go to New Zealand for advanced work, most of them return to the area of their origin without further training. Although some of them would like to come to Hawaii for further training, the licensure difficulties here prevent more than what might be called medical student activity, at a level of responsibility inadequate for further training. New Zealand offers temporary licensure, and thus students going there can get the desired training. However, relatively few take advantage of this opportunity, in part because they may have come from an area far away, outside the immediate influence of New Zealand—for instance, from the islands of Micronesia.

Two obstacles appeared early in the consideration of real development of the Pago Pago Center. The first was funding. We set out to look for financial support from private foundations, from the local government in American Samoa, and from Washington; and although interest was general, money so far has not been forthcoming. To date the relatively minor assistance that we have been able to give American Samoa had been from small miscellaneous shoestring funds. This contrasts with the complete support of the Okinawa program from U.S. Army funds.

A second obstacle was our uncertainty as to Samoan willingness to have the Center serve as an international, as well as a local, center.

At this stage one searches for a second moral to be drawn from experience. The questions in mind run somewhat as follows. Is American Samoa different from Okinawa? Is it to be Samoa for the Samoans, or is the relationship to the rest of the world to be more like Hawaii's? Is our interest temporary, just to get them started, or will we in time be associates, much as California and Arizona complement each other? After a while, can there be no "there and here," but a "one world" relationship?

Perhaps no one knows the answers to these questions, or what the wisest course is for American Samoa to follow. One would like to think that this is the decision of the people of Samoa, but at the same time must realize that others may have a detached view of the values concerned, and that the detached view is sometimes clearer than that from close at hand. From Hawaii, it looks as though the door in American Samoa has been opened too far to be closed. Too many young people have found their way to Hawaii and to California, to become citizens of the world, to make the thought of a society more or less withdrawn into itself a desirable future.

I think that we should anticipate a day when there is a completely unconscious feeling of equality and unity between American Samoa and Hawaii, and that this feeling may start with the health team in American Samoa. I would anticipate that some of the physicians would be of Samoan origin, some would come from Hawaii, and some would come from farther away, just as our faculty in Hawaii derives from around the world. Samoa, Hawaii, Papua, Fiji, and New Zealand together could provide an educational community to furnish health personnel for the Pacific. Samoa could look proudly to being an educational center, to which students from other areas would come for part of their education. My personal hopes are that American Samoa follows this course, and does not retreat into itself. ■

New Style for References

With the *New England Journal of Medicine*, the *Annals of Internal Medicine*, and the A.M.A. publications taking the lead, American medical journalism has charted a course toward uniformity of style of references to the literature. It is earnestly hoped the contributors to the JOURNAL will take note, and cut out this editorial for their

secretaries to paste on the wall beside the typewriter. The new style is not pretty, to the "square" editorial eye, but it is streamlined and modern, and it is readable.

Please have your references typed as follows:
1. Smith JR, Doe JD, Roe RR, et al: This is how to do it. *Acta Artefacta* 9:100-102, 1969.

Of 156 proven cases of gastric adenocarcinoma at Kuakini Hospital, 148 were Japanese, and 15 percent survived five years.

Carcinoma of the Stomach

At Kuakini Hospital (1960-1964)

ROBERT H. OISHI, M.D.,* Honolulu

● It has been noted that the incidence of stomach cancer in the United States has been steadily decreasing,¹⁻⁶ however, this has not been evident in Hawaii.⁷⁻⁹ During the period 1960-1964, the stomach was the second leading site of cancer in Hawaii, with 601 cases. Of these, 361 cases (60%) were in the Japanese population (227 men and 134 women). For comparison, the racial distribution of the population in Hawaii is shown in Table 1. Reports^{2, 10} have noted the high incidence of stomach cancer in Japanese. This ethnic factor is significant.

DURING THE PERIOD 1960-1964, 202 cases (all private cases) were added to the Cancer Registry of Kuakini Hospital (Table 2). Of these, 43 cases were excluded for various reasons, listed in Table 3. Many of those listed under "no histologic proof" had a presumptive diagnosis made by x-ray examination only. However, for homogeneity, only patients with adenocarcinoma

TABLE 1.—Racial distribution of population in Hawaii, 1967.

	NUMBER	PERCENT
Japanese	212,631	30.0
Caucasian	179,993	24.6
Hawaiian & part-Hawaiian	135,580	19.3
Mixed (except Hawaiian)	57,231	8.1
Filipino	57,015	8.1
Chinese	37,866	5.4
Others	12,539	1.8
Portuguese	5,086	0.7
Not reported	3,539	0.5
TOTAL	701,480	100.0

* From the Department of Oncology Kuakini Hospital, 347 No. Kuakini St., Honolulu, Hawaii 96817.
Revision accepted for publication December 17, 1969.

TABLE 2.—Cancer Registry Kuakini Hospital: cancer of the stomach (1960-1964).

	TOTAL HOSPITAL ADMISSIONS	TOTAL CANCER PATIENTS	TOTAL STOMACH CANCER
1960	7,499	235 (3.1%)	34 (14.1%)
1961	7,456	244 (3.3%)	44 (18.0%)
1962	7,072	205 (2.9%)	35 (17.1%)
1963	7,620	229 (3.0%)	44 (19.2%)
1964	7,434	242 (3.2%)	45 (18.6%)
TOTAL	37,061	1,155 (3.1%)	202 (17.1%)

histologically proved at either surgery or autopsy were included in this study. Of the remaining 156 cases, the age by decades when first accessioned is shown in Figure 1. Figure 2 shows the age-sex distribution by decades.

The surgical procedures were performed by the attending surgeons; technique and procedure were therefore variable.

The stage of disease was considered "local" if no lymph node involvement occurred, and "remote" if the tumor extended beyond the immediate perigastric lymph node region.

The survival pattern used was in accordance with the life table method described by Cutler and Ederer.¹¹ However, there were three cases lost to follow-up (1.9%) and each was considered dead at the time of withdrawal from this study.

Because of insufficient data, such prognostic

TABLE 3.—Cases excluded from registry.

No histologic proof	23
Incidental finding, autopsy	7
Initial treatment elsewhere	13
Carcinoid	1
Leiomyosarcoma	1
Reticulum cell sarcoma	1
TOTAL	46

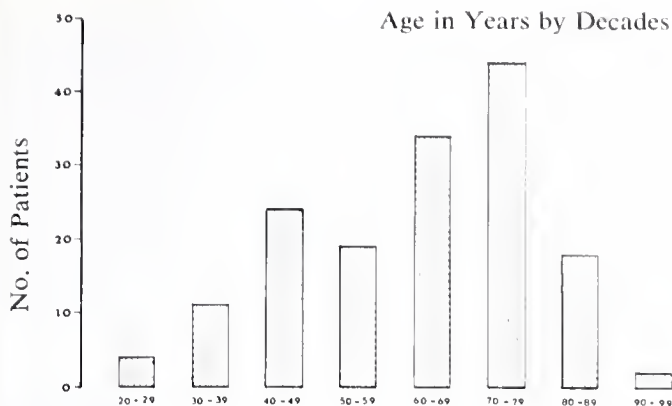


FIG. 1.—Age distribution of 156 patients with stomach cancer (1960-1964).

factors as weight loss and level of gastric acidity were not included in this study.

RESULTS AND DISCUSSION

Incidence: It has been estimated that about 70% of the patients admitted to Kuakini Hospital are of Japanese descent. This explains the extremely high proportion (95%) of Japanese (Table 4) in this series; in the population of this State the proportion among stomach cancer cases is 60%.⁷ During this period, stomach cancer was found in 0.5% of all admissions to Kuakini Hospital.

Sex and Age: There was a male:female ratio of 3:2, which differs slightly from other studies^{6, 11, 12, 14} reporting it as 2:1. The age distribution showed a rise in the fifth decade as well as in the eighth. In men, the peak occurred in the eighth decade, whereas in women it occurred in the fifth.

In other series^{8, 13} no age-sex difference was noted, the pattern showing that in both sexes stomach cancer is a disease of the elderly. Stemmermann¹⁵ believes that this rise in the fifth decade represents a correspondingly higher Japa-

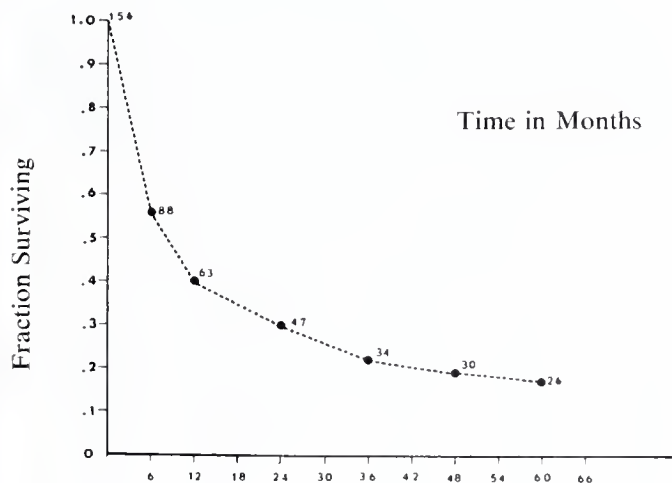


FIG. 3.—Survival pattern of 156 patients (1960-1964).

TABLE 4.—Race of stomach cancer cases.

Japanese	148
Caucasian	2
Hawaiian-Chinese	2
Chinese	1
Puerto Rican	1
Korean	1
TOTAL	156

nese female population in Hawaii in this age group.

Young Adults: Much has been written regarding cancer of the stomach in the young adult.¹⁶⁻¹⁸ In our present series, there were eight cases occurring in persons less than 36 years old with four of these cases occurring in persons less than 31 years, for a rate of 4% and 2% respectively. Tamura¹⁸ reported an incidence of 6% for patients less than 36 years old and 3.2% for patients less than 31 years old at The Queen's Hospital.

TABLE 5.—Analysis of operability of stomach cancer cases (1960-1964).

Inoperable (no operation)	13 (8.3%)
Exploratory (with biopsy and/or bypass)	43 (27.0%)
Palliative resection	36 (24.0%)
Curative resection	61 (39.0%)
Refused surgery	3 (1.9%)
TOTAL	156

In his series there were ten women and five men; in our series there were six women and two men. The incidence quoted in the literature varies from 0.7%¹⁷ to 2.8%.¹⁶

Treatment: Approximately 90% of the patients had some type of operative procedure (Table 5). Healey¹³ reported an operability rate of 85.5%, with curative resection being performed on 40%, palliative resection on 31.2%, and exploratory laparotomy only on 14.2%. ReMine and Priestley⁶ had a resectability rate of 60% (curative resection 50% and exploratory laparotomy 39%). In our series the resectability rate, as shown in Table 6, was also 60%. Total gastrectomy was performed in 20.7% of the operations and subtotal in 48.6%. In Healey's series (247 patients) the resectability rate was 74.4%, with total gastrectomy being performed in 15.6% and subtotal in 58.8%.

TABLE 6.—Operative procedures on 140 cases of stomach cancer (1960-1964).

OPERATION	NO. OF CASES	PERCENT
Laparotomy—biopsy	36	26.0
Laparotomy—bypass	7	5.0
Total gastrectomy	29	20.7
Curative	16	11.4
Palliative	13	9.3
Subtotal gastrectomy	68	48.6
Curative	45	32.2
Palliative	23	16.4

TABLE 7.—Survival pattern of stomach cancer cases after various surgical procedures (1960-1964 140 cases).

TIME	CURATIVE			PALLIATIVE			EXPLORATORY
	Total Resection	Subtotal Resection	All Cases	Total Resection	Subtotal Resection	All Cases	
OPERATIVE	16	45	61	13	23	36	43
1-6 Months	14	45	59	12	22	34	38
7-12 Months	14	44	58	8	11	19	9
13-24 Months	10	38	48	5	8	13	3
25-36 Months	7	33	40	5	3	8	0
37-48 Months	5	27	32	3	0	3	0
49-60 Months	5	25	30	2	0	2	0
49-60 Months	4	22	26	1	0	1	0

Mortality: Of the 140 patients subjected to surgery, nine died within 30 days, for an over-all operative mortality rate of 6.5%. Twenty-nine patients were submitted to total resection, with three deaths, for an operative mortality rate of 9.7%. The operative mortality was 2.2% for subtotal resection and 11.5% for exploratory surgery. ReMine and Priestley reported an over-all mortality rate of 6.2%, with total resection of 15.4%; subtotal of 61.7%; palliative operation of 4.8%; exploration only of 3.9%. Healey had a high over-all figure, 14.5%, with an 18.2% mortality rate for total resection and 8.5% for subtotal.

no such patient lived more than two years. Moertel reported recently that the median survival in these patients was four months.

In this series the survival pattern showed that of patients without lymph node involvement, a much higher percentage (73.5%) were alive after five years as compared to those with nodal involvement (17.4% as shown in Table 8).

The absolute survival rate of those patients followed in this series for at least five years (1960-1963), with 18 surviving out of 124 patients, was 15.3%. The survival rates reported in the literature^{3, 6, 13} range from 5.6% to 15.9%.

SUMMARY

Cancer of the stomach cases accessioned in the Kuakini Hospital Cancer Registry from 1960 through 1964 have been reviewed. Of the total 202 cases, 43 were excluded, leaving 156 cases for study. During this period there were 37,061 hospital admissions, of which 1,155 were cancer cases (3.1%). The cancer of the stomach cases (202) represented 17.1% of the hospital cancer patients accessioned during this period (Table 2).

There was a 3:2 male-female ratio. There was a predominance in the fifth and eighth decades, which is identical with a report from other localities. No reason is known for the predominance of this disease in women in the fifth decade.

The operability rate was 90% with a resectability rate of 69%. The survival pattern showed that of patients undergoing curative resection, 43% were alive at the end of this five-year period of

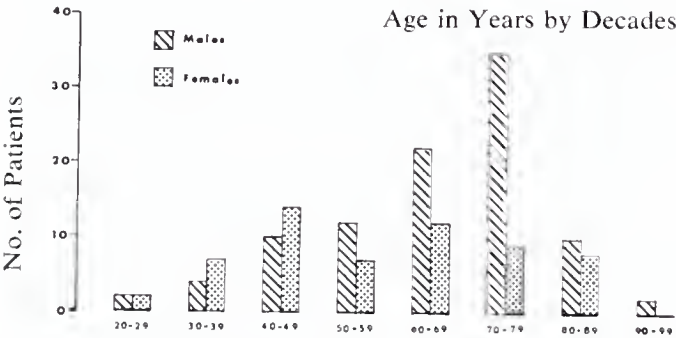


FIG. 2.—Age distribution by sex of 156 patients with stomach cancer (1960-1964).

Survival: The over-all survival pattern is shown in Figure 3. The survival pattern according to surgical procedure is shown in Table 7. It is noteworthy that 88% of patients receiving exploratory operation only (including a bypass procedure) were dead of the disease within six months, and

TABLE 8.—Survival pattern of 156 cases of stomach cancer in relation to stage of disease (1960-1964).

	ALL CASES		LOCAL		REGIONAL		REMOTE	
	Dead 0	Alive 156	Dead 0	Alive 19	Dead 0	Alive 64	Dead 0	Alive 73
OPERATIVE	9	145	0	19	2	62	7	66
1-6 Months	59	86	0	19	10	52	49	17
7-12 Months	25	61	0	19	15	37	10	7
13-24 Months	16	45	0	19	12	25	4	3
25-36 Months	13	32	3	16	9	16	1	2
37-48 Months	4	28	1	15	2	14	1	1
49-60 Months	4	26	1	14	3	11	0	1

study. The survival pattern of patients showing no lymph node involvement in the resected specimen was higher (73.5%) than those with lymph node involvement (17.4%).

The absolute five-year survival rate was 15.3% (1960-1963) which is almost identical to Strode's⁹ 13%. Hoerr's comment³ seems to be well founded: "Five-year survival [of cancer of the stomach] depends a great deal more on the stage of the

carcinoma at the time of operation than on (1) the institution at which the operation is performed, (2) the surgeon performing the operation, or (3) the procedure that is used."

ACKNOWLEDGMENT

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COOPER HOSPITAL QUIZ

- (1) Marijuana may give a user some sort of a "trip," but it will not produce a psychosis like amphetamine. TRUE or FALSE
- (2) It has only been recently that nonmedical people have suggested marijuana as a "psychic liberator." TRUE or FALSE
- (3) Type E botulism is particularly dangerous due to the fact that type E spores will germinate and produce toxin at refrigerator temperatures. TRUE or FALSE
- (4) A recent study indicates there is a familial relationship between soft-tissue sarcomas and
 - (a) diabetes mellitus
 - (b) leukemia
 - (c) breast carcinoma
 - (d) adult progeria
 - (e) any type of congenital abnormality
- (5) A patient presenting with an erythematous maculopapular skin eruption defies diagnosis. A skin biopsy in an uninvolved area stained with fluorescein-labelled antihuman IgG shows a fluorescent band of the dermal-epidermal junction. This patient most likely has
 - (a) discoid lupus erythematosus
 - (b) systemic lupus erythematosus
 - (c) psoriasis
 - (d) pemphigus vulgaris
 - (e) erosive lichen planus
- (6) Serum alkaline phosphatase is elevated in malignancy only where there is considerable metastasis. TRUE or FALSE

Answers will be found beginning on page 318

Japanese gastric cancer patients have significant immunologic differences from healthy controls.

Immunology of Stomach Cancer in Japanese

II. Sera of Stomach Cancer

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● *Sera from 74 patients with gastric carcinoma showed higher than normal incidences of thyroid antibodies and the rheumatoid factor, and lower incidences of parietal-cell antibodies and the antinuclear factor, than normal controls. The reasons for this are not known.*

This study attempted to determine whether or not an immunologic association exists between cancer of the stomach and other immunological diseases in the same individual. The data presented showed high incidences of thyroid antibodies and rheumatoid factor but low incidences of parietal-cell antibodies and antinuclear factor in the sera of patients with gastric carcinoma. Possible explanations for these findings were put forward. However, the exact relationship between the pathogenesis of cancer and some of the immunological diseases associated with it still remains to be elucidated.

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INCREASED EVIDENCE of proneness to gastric cancer in patients with pernicious anemia and chronic atrophic gastritis, at least among Caucasians, has been documented. In fact, the presence of significant amounts of circulating antibody against gastric intrinsic factor and the cytoplasm of gastric parietal cells has been detected in the serum of patients with pernicious anemia.¹⁻⁸ On the other hand, sera from patients with chronic atrophic gastritis were found to contain antibodies to parietal cells but not to the intrinsic factor.⁹⁻¹⁵

It has also been noted that sera from patients with pernicious anemia or chronic atrophic gastritis frequently contain antibodies to thyroid acinar cells and thyroglobulin.¹⁶⁻¹⁹ Conversely, patients with Hashimoto's disease or thyrotoxicosis had a high incidence of serum parietal-cell antibodies.²⁰⁻²²

In this study an attempt was made to find an antibody against parietal cells in the serum of patients with gastric cancer. In addition, immunologic patterns of the sera were analysed for immunoglobulin levels, rheumatoid factor, antinuclear factor, and thyroglobulin antibodies.

TABLE 1.—Mean value of immunoglobulin levels of cancer patients.

SUBJECT	NO. TESTED	Ig LEVELS (mg%)		
		IgG	IgA	IgM
Male	46	992.54 ±193.69 (420 1825)*	168.50 ±56.39 (34 287)	58.39 ±29.19 (10 154)
Female	28	1083.03 ±227.48 (320 1830)	161.25 ±76.26 (48 328)	67.25 ±39.99 (23 230)
Total	74	1026.78 (320 1830)	165.75 (34 328)	61.74 (10 230)
Control	1,097	1193.65 ±325.21 (580 1620)	221.03 ±70.23 (88 360)	56.27 ±31.51 (42 182)

* The values in parenthesis indicate the range.

MATERIALS AND METHODS

Serum samples from 74 Japanese patients with stomach cancer were supplied by various university hospitals and cancer centers in Japan, and by Kuakini Hospital in Honolulu. Control sera were obtained from a random population sample of Japanese men and women between the ages of 45 and 65 living in the Honolulu area.

Immunoglobulin (Ig) levels were determined by modification of a simple radial immunodiffusion method described by Fahey and McKelvey,²³ using antisera specific to IgG, IgA, and IgM respectively. Pure Ig fractions and specific antisera were prepared at this laboratory. The diameters of the precipitin rings were measured by finescale (Finescale Co., Los Angeles, California) and converted to mg%, using values obtained from known concentrations of standard serum obtained from Hyland Laboratories, Los Angeles, California.

Latex globulin reagent for rheumatoid factor (RF) and Latex nucleoprotein reagent for anti-nuclear factor (ANF) were obtained from Hyland Laboratories and the tests were performed according to the methods described by the manufacturer. Parietal cell antibody (PcA) tests were carried out by the method described by Fisher and Taylor,¹⁴ using Coon's immunofluorescent antibody technique. Gastric mucosa for the PcA tests was obtained by autopsy on patients with blood group O. Thyroid antibody (TA) tests were carried out by the tanned red-cell method described by Wellcome Research Laboratories, Beckenham, England, using the manufacturer's thyroglobulin-sensitized sheep cells and control cells. Plastic agglutination trays used for the demonstration of the reactions were obtained from Scientific Products. Sera which were negative by the above tests at dilutions of 1:25 or higher were retested using further dilutions.

TABLE 2.—Incidence of RF¹, ANF², and PcA³ in both sex groups of cancer patients.

SEX	NO. TESTED	RF	ANF	PcA
Male	46	10 (21.7%)	4 (8.6%)	0 (0)
Female	28	4 (14.2%)	3 (10.7%)	1 (3.5%)
Total	74	14 (18.4%)	7 (9.2%)	1 (1.4%)
Control Male	100	2 (2.0%)	1 (1.0%)	0 (0)
Control Female	100	6 (6.0%)	3 (3.0%)	0 (0)
Control Total	200	8 (4.0%)	4 (2.0%)	0 (0)

¹ Rheumatoid factor; ² Anti-nuclear factor; ³ Parietal cell antibody.

RESULTS

Table 1 shows the results of serum Ig levels in 74 cases of gastric carcinoma: 46 were men between the ages of 31 and 86, mean age of 56.52 ± 10.15 years; 28 were women between the ages of 26 and 70, mean age of 51.32 ± 10.08 years. In the male group, the mean values for IgG, IgA, and IgM were 992.5 mg%, 168.5 mg%, and 58.4 mg% respectively. In the female group, the corresponding mean values were 1083.0 mg%, 161.3 mg%, and 67.3 mg%.

In this study, the control group consisted of 1,097 presumably healthy Japanese men between the ages of 45 and 65, with a mean age of 53.06 ± 13.16 years. The mean values obtained for each Ig level were: 992.54 mg% for IgG, 168.5 mg% for IgA, and 58.39 mg% for IgM. Standard deviations for each group are indicated in Table 1.

Positive RF reactions were found in 21.7% of the male group and 14.2% of the female group. These results showed a considerably higher incidence among cancer patients as compared with a normal control group of 100 men and women (Table 2). Positive ANF reactions were found in 8.6 percent of the male group and 10.7% of the female group. These results are comparable to the incidences of 1.0% in males and 3.0% in females in our normal control subjects (Table 2).

In the PcA test, one* serum sample demonstrated a positive reaction with gastric parietal cells. In addition, two cases* were found to contain antibodies to gastric mucoid epithelial cells but not to parietal cells.

Table 3 shows the incidence and titers of TA in the sera of cancer patients. Positive reactions with titers of 1:250 and higher were seen in 17.1% of the men and 21.4% of the women.

* Results confirmed by Dr. K. B. Taylor, Stanford Medical Center.

TABLE 3.—Incidence and titer of thyroglobulin antibody (TA).

SÉRUM FROM	SEX	NO. TESTED	TA TITER		TOTAL
			<i>Below 250</i>	<i>250 and over</i>	
Cancer Patients	Male	46	6 (13.3%)	8 (17.1%)	14 (30.4%)
	Female	28	9 (32.1%)	6 (21.4%)	15 (53.5%)
	Total	74	15 (20.2%)	14 (18.9%)	29 (39.4%)
Control	Male	100	0 (0)	0 (0)	0 (0)
	Female	100	4 (4.0%)	0 (0)	4 (4.0%)

Titers of less than 1:250 were seen in 13.3% of the men and 32.1% of the women. The total frequencies of positive reactions were 30.4% and 53.5% for men and women, respectively. No positive agglutination was found in the male control group, while four positive reactions with titers below 1:250 occurred in the female group.

DISCUSSION

In this study, the immunoglobulin levels of patients with gastric carcinoma showed considerable variation. However, the mean values for the cancer patients were within normal ranges as compared with the levels of the control group. These findings suggest that gastric cancer does not impair the immunological response.

Numerous studies employing various serologic tests have shown considerable overlap between gastric and thyroid autoimmunity. A relationship between gastritis and thyroiditis was implied when pernicious anemia and hypothyroidism (atrophic thyroiditis) were found concurrently in the same patient.²¹ Previous postmortem studies have suggested an association between thyroid and gastric diseases by the finding of a high incidence of pernicious anemia in patients with primary myxedema and, conversely, by a high incidence of thyrotoxicosis in pernicious anemia patients.²⁴ In addition, immunologic tests frequently show the coexistence of thyroid and gastric antibodies in patients with pernicious anemia and thyroid disease.¹⁹⁻²¹ Doniach *et al*²⁵ supported this view by demonstrating the high incidence of antibodies to both gastric mucosa and thyroid tissue within family members of patients with either pernicious anemia or thyroiditis.

Because of the possible immunologic relationship between the stomach and thyroid and the fact that both organs develop ontogenetically from the same gut, we looked for gastric and thyroid antibodies in the serum of patients with stomach cancer. This study showed a considerably higher incidence of thyroglobulin antibody in the serum

of gastric cancer patients as compared with our normal controls and in other disease conditions reported by various investigators.^{8, 26} Only one gastric cancer serum sample showed a positive reaction with parietal cells of the gastric mucosa. This seemed to indicate that the frequency of PcA in cancer patients is less than in normal control groups.^{8, 12, 14, 25, 27, 28}

Doniach *et al*²⁰ found thyroglobulin antibody in the sera of 23% of their elderly controls. However, our control group, consisting of 100 each men and women, distributed over a similar age group within the same race, revealed an incidence of 4% for the antibody. Therefore, it is believed that the antibody activity was not attributable to a nonspecific reaction. The titer of the thyroglobulin antibody was found to be high in approximately half of the cases, with two cases having titers of 1:250,000.

Irving *et al*⁸ failed to find gastric parietal-cell antibodies in nine patients with carcinoma of the stomach. These patients' sera were also negative for antibodies to thyroid tissue as assessed in complement fixation and tanned red-cell hemagglutination tests. Also, none of the sera contained antinuclear factor. In contrast to these findings, Kravetz *et al*²⁸ recently demonstrated circulating parietal-cell antibodies in six out of 67 patients (9%) with gastric carcinoma.

Possible explanations for the lack of gastric parietal-cell antibody in the sera of patients with gastric cancer were considered. Normally, few parietal cells are present in the pylorus. It was in this region that Nagayo and Kawagoe²⁹ most frequently observed cases of gastric carcinoma in Japanese. Moreover, cases of atrophic gastritis associated with tumors or ulcers were also found to be limited to the pylorus.^{30, 31} In contrast to the above, the simultaneous occurrence of atrophic gastritis with that of pernicious anemia was observed more often in the corpus, where parietal cells are mainly located. Schell *et al*³² reported that the majority of cancers which accompany pernicious anemia, or which are associated with

a high titer of antiparietal-cell antibodies, are found in the corpus rather than in the pylorus.

These studies suggest that the relationship between the location of the cancer and the relative population of parietal cells may be a factor in the lack of antibody against these cells. Other possibilities are that a small amount of parietal-cell antigen may leak through the cancerous lesion and the immunofluorescent method may have been unable to detect the low titer of the antibody, or that the antibody may have been absorbed by the parietal cells distributed within the body of the stomach. The data presented in this study, however, do not give conclusive support to any of the above explanations.

The incidence of rheumatoid factor was high (18.4%) as compared with normal groups in this study and in other reports.^{26, 33, 34} It may be assumed that the above results simply reflected the older ages of the patients, or that the cancerous condition led to the formation of the rheumatoid

factor. The antinuclear factor was shown to be normal (9.2%) and was within the range (1-20%) reported by other investigators.³⁵⁻³⁸ There was no significant correlation of the positive results between RF, ANF, thyroid, and parietal-cell antibodies in the patients.

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HMA's 114th Annual Meeting—May 3-9

Taking the Puerto Rican incidence of HPS as unity, Caucasian incidence is 2, Japanese 1/2, and Filipino 1/10. Chinese is 0!

276 Cases of Pyloric Stenosis in Hawaii

II. Racial Aspects

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● Two hundred-seven infants with hypertrophic pyloric stenosis were studied to determine incidence of this disease among 196,052 Caucasian, Japanese, Chinese, Filipino, Puerto Rican, and Korean live births in Hawaii from 1942 to 1966. The incidence per 1,000 live births among these groups is: Caucasian, 1.9 ± 0.2 ; Japanese, 0.52 ± 0.08 ; Puerto Rican, 1.0 ± 0.5 ; Korean, 0.8 ± 0.8 ; and Filipino, 0.09 ± 0.06 . Of interest is the absence of this lesion in 11,274 Chinese infants.

There is a significant correlation of first birth with pyloric stenosis; among Japanese there also is a correlation of second birth with the disease. All infants with pyloric stenosis exhibited significantly higher birth weights than their nonaffected counterparts.

This study indicates that ethnic background affects disease incidence, and that we

should beware of interpreting geographic for racial incidence.

PHYSICIANS IN HAWAII have long suspected that congenital hypertrophic pyloric stenosis is much less common among Oriental than among Caucasian infants. It is known that the disease does occur with different frequencies among other racial groups: e.g., it is less frequent among Negroes in the United States than among whites, and differences in incidence have been reported among European and Mediterranean Caucasian ethnic groups.¹⁻⁸

The different races of Hawaii live in a relatively homogeneous socioeconomic setting which makes this State an ideal place to compare the incidences of various diseases among racial groups. Although the rate of racial intermarriage is high, endogamy is the usual pattern. In this study data have been gathered to determine the effect of race on the occurrence of pyloric stenosis. Genetic aspects will be presented in another communication,⁹ and clinical data have been previously reported.¹⁰

METHODS

Selection and Diagnosis: The survey period covered 25 years, 1942-1966. Patients were

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TABLE 1.—*Places of Ascertainment.*

ISLAND	HOSPITAL NAME	YEARS	NO. OF CASES
Oahu	The Queen's Hospital	1947-1966	19
	St. Francis Hospital	1944-1966	14
	Tripler Army Hospital	1948-1966	125
	Kaiser Foundation Hospital	1958-1966	11
	Leeward General (Aiea)	-	0
	Wahiawa General Hospital	1957-1966	0
	Castle Memorial Hospital	-	0
	Kuakini Hospital	1944-1966	2
	Kauikolani Children's	1942-1966	88
Kauai	Kauai Veteran's Hospital	1955-1966	1
	Wilcox Memorial Hospital	1942-1966	2
Maui	Maui Memorial Hospital	1956-1966	5
Hawaii	Hilo Memorial Hospital	1950-1966	9
	Kona Hospital	-	0
	Kohala Hospital	-	0
	Honokaa Hospital	-	0
			276*

* Representing 273 families.

identified from 16 hospitals in Hawaii (Table 1), which include all the centers for pediatric care in the State. A diagnosis of pyloric stenosis was accepted if a pyloric "tumor" could be described at surgery; patients who had been treated medically for pyloric stenosis were excluded. Two hundred and seventy-six patients were found.

Race: The racial structure of the peoples of Hawaii has been described by Morton, Chung, and Mi¹¹ as comprising seven major ethnic groups: Caucasian, Japanese, Chinese, Filipino, Korean, Hawaiian, and Puerto Rican. A group of "others" includes Negroes, Samoans, and other Pacific groups. Because the number of pure Hawaiians is so small, and the "others" group is so heterogeneous, they are not included in the study.

Racial Incidence: Data on racial distribution for all births, 1942-1966, were obtained from birth certificates filed with the Hawaii State Department of Health. Information from these certificates, including race of parents, birth weight, and birth order of the infant, had already been transcribed on magnetic tape as part of another study.¹² The race of the infant was determined from parental race as stated on the birth certificate. Relying on birth certificates for determining racial extraction is considered quite accurate.¹¹

Calculations on racial incidence were done with a CDC 3100 computer. The use of data retrieval systems and computer analysis enabled a large number of data to be handled efficiently and accurately.

There were 372,678 live births in the survey period, from which 276 index patients with pyloric stenosis were found. Illegitimate births and records in which information was missing for race of parent, birth weight, and birth order of the infant were excluded. The number of certificates remain-

ing for study, 317,015, included 244 patients with pyloric stenosis. The six major groups—Caucasian, Japanese, Filipino, Chinese, Korean and Puerto Rican—were represented by 196,052 live births and 207 infants with pyloric stenosis. The remaining infants belonged to the "others" or Hawaiian groups, or were of mixed ancestry.

RESULTS

The incidence of pyloric stenosis in the six groups is shown in Table 2. Five groups, Caucasian, Puerto Rican, Japanese, Filipino, and Chinese, are of sufficient size for meaningful comparison. The incidence for Caucasian infants per 1,000 live births was 1.9 ± 0.2 , for Puerto Ricans 1.0 ± 0.5 , for Japanese 0.52 ± 0.08 , and for Filipinos 0.09 ± 0.06 . A surprising finding was the absence of this disorder among the 11,274 "pure" Chinese live births. The group of Korean infants was so small the incidence figure is not reliable because of the large standard error.

In addition to the total sample of affected and normal infants, the Caucasian and Japanese groups were of sufficient size to permit regression analysis

TABLE 2.—*Hypertrophic pyloric stenosis by race in Hawaii, 1942-1966.*

RACE	BIRTHS	PYLORIC STENOSIS	INCIDENCE PER 1,000 LIVE BIRTHS
Caucasian	83,257	157	1.9 ± 0.2
Puerto Rican	3,850	4	1.0 ± 0.5
Korean	1,210	1	0.8 ± 0.8
Japanese	73,831	43	0.52 ± 0.08
Filipino	22,630	2	0.09 ± 0.06
Chinese	11,274	0	....
TOTAL	196,052	207	

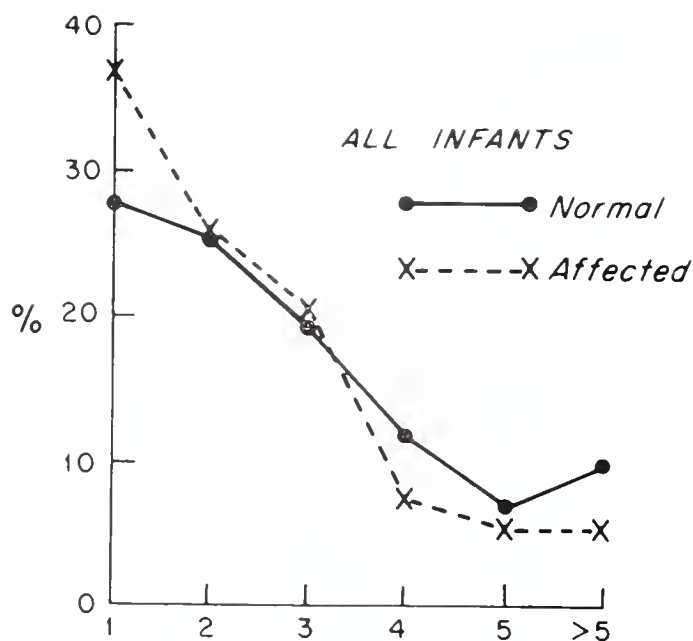


FIG. 1.—Birth rank and pyloric stenosis in all infants.

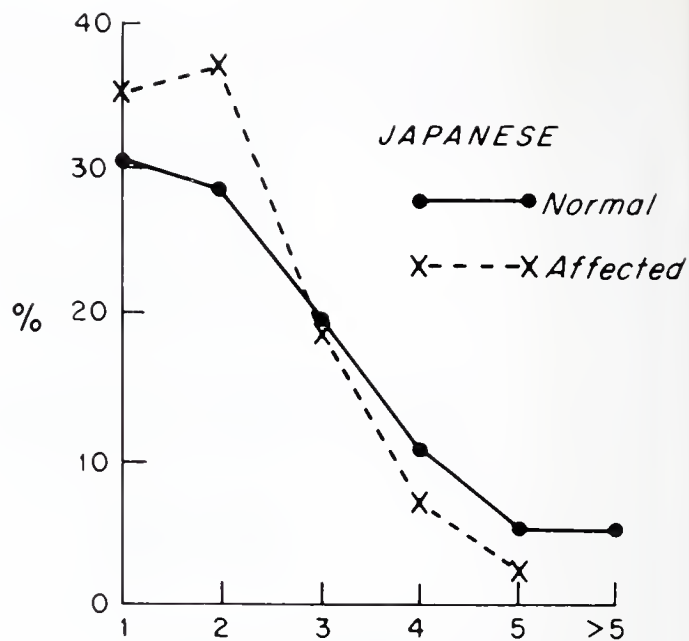


FIG. 2.—Birth rank and pyloric stenosis in Japanese infants.

TABLE 3.—Comparison of birth order with proportion having pyloric stenosis.

BIRTH ORDER	NORMAL BIRTHS	% TOTAL	PYLORIC STENOSIS	% TOTAL
<i>All Infants</i>				
1	84,709	26.7	87	35.7
2	80,184	25.3	63	25.8
3	59,472	18.8	51	20.9
4	38,708	12.2	18	7.4
5	22,763	7.2	13	5.3
>5	30,935	9.8	12	4.9
TOTAL	316,771	100.0	244	100.0
<i>Caucasian</i>				
1	26,248	31.6	58	37.7
2	23,131	27.8	38	24.7
3	15,548	18.7	30	19.5
4	9,015	10.9	10	6.5
5	4,587	5.5	9	5.8
>5	4,584	5.5	9	5.8
TOTAL	83,103	100.0	154	100.0
<i>Japanese</i>				
1	23,598	30.0	14	34.2
2	22,364	28.4	15	36.6
3	15,714	19.9	8	19.5
4	9,118	11.6	3	7.3
5	4,350	5.5	1	2.4
>5	3,646	4.6	0	0.0
TOTAL	78,790	100.0	41	100.0

of first birth and pyloric stenosis. In the total normal population of 316,771 infants 26.7% were firstborn, while 35.7% of 244 affected infants were firstborn. This relationship held also for the Caucasian normal and affected, in whom the percentage firstborn was 31.6 and 37.7 respectively. For Japanese babies the percentage of firstborn normals and affected was 30.0 and 34.2, respectively (Table 3). In all three groups, first birth correlated positively with pyloric stenosis ($p < .01$).

An unexpected finding was the higher than normal incidence of secondborn Japanese infants who had the disease (normal secondborn, 28.4%; affected secondborn, 36.6%). Graphic comparisons of the percentage of normal and affected infants relative to birth order is given for all infants and for Japanese babies. (Figures 1 and 2).

Table 4 compares the birth weights of affected and nonaffected among Caucasian and Japanese infants, as well as for the entire sample of 317,015 live births. All groups with pyloric stenosis were heavier by 0.22 to 0.31 pounds than the nonaffected groups. A positive correlation existed between higher weight and the disease for these groups, $p < .001$.

The male:female ratio among infants with pyloric stenosis was about 4:1 for all groups in

TABLE 4.—Birth weight and pyloric stenosis.*

GROUP	NONAFFECTED		AFFECTED		WEIGHT DIFFERENCE
	Number	Av. Wt.	Number	Av. Wt.	
All infants	317,015	7.03 lb	252	7.34 lb	+0.31 lb
Caucasian	83,257	7.22	157	7.57	+0.35
Japanese	73,015	6.91	43	7.13	+0.22

* Using multiple regression analysis, controlling the variation due to year of birth, maternal age, birth order, sex and race, birth weight was positively correlated with pyloric stenosis, $p < .001$.

TABLE 5.—Incidence of pyloric stenosis in different countries.

COUNTRY	YEAR	AUTHOR	CASES PER 1,000 LIVE BIRTHS
England	1951	MacMahon (14)	3.0
England	1946	Davison (4)	2.8 ± 0.8
Israel	1963	Laron & Falk (7)	0.5
Malaya	1951	Field (16)	Unknown
Malta	1965	Cachia & Fenech (8)	0.9 ± 0.5
Scotland	1951	Lawson (6)	1.5
Scotland	1956	McLean (18)	3.3
Sweden	1941	Wallgren (3)	4.0
Sweden	1960	Wallgren (13)	1.99
Turkey	1940	Eckstein (15)	Very rare
U.S.A.			
White	1957	Laron & Horne (1)	1.2 ± 0.4
Negro	1957	Laron & Horne (1)	0.5 ± 0.4
Negro	1966	Hara et al (2)	0.92

the study and is not significantly different from other reported series.^{5, 13, 14, 18, 19, 20}

DISCUSSION

The incidence of pyloric stenosis is known to vary in different countries; a summary of these studies is shown in Table 5. The studies reported here are the first to be carried out in the Oriental, Puerto Rican, and Filipino races, whose incidence of pyloric stenosis is lower than the incidence among Caucasians in the Hawaiian Islands. The Caucasian incidence, of 1.9 ± 0.2 per 1,000 live births, is similar to the figures of 1.2 ± 0.5 and 1.5 ± 0.3 reported for Pittsburgh and Scotland.^{1, 6} It is markedly different, however, from the incidence in Sweden and England, where the occurrence of pyloric stenosis is reportedly between three and four per 1,000 live births.^{3, 4, 14}

The absence of pyloric stenosis among Chinese infants is of interest. Other ethnic groups have been reported to have a low incidence. Laron and Falk report an incidence of 0.2 cases per 1,000 among non-Ashkenazi Jewish live births in Israel.⁷ The disease is reported to be "rare" in Turkey,¹⁵ and absent in Malaya¹⁶ and among the aborigines of Australia.¹⁷ No data are available from Taiwan, Hong Kong, or the mainland of China.

Although the predilection of pyloric stenosis for firstborn infants is generally accepted,⁽¹⁸⁻²³⁾ some have questioned this finding.⁽²⁴⁻²⁶⁾ Our data indicate a significantly higher risk to firstborns, and this finding is corroborated by McKeown.⁵

A significantly greater birth weight was noted in affected Caucasian and Japanese infants (Table 5). This difference was described also by Malmberg,²⁰ but its significance is not clear. This observation tends to support a congenital rather than a postnatal cause of pyloric stenosis.

This study points out the need to define the proportions of ethnic or racial groups within the

population under study. Disregarding race, the "average" incidence of pyloric stenosis in Hawaii was 0.77 per 1,000 live births. This does not reflect the range from 1.9 per 1,000 live births in Caucasians to 0.09 in Filipinos and its absence in Chinese. Care must be exercised to distinguish geographic incidence from ethnic incidence.

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*Partial cardiopulmonary bypass, from femoral vein
to femoral artery, is quicker and easier.*

Thoracic Aortic Aneurysms

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and WALTER H. K. WATT, M.D., *Honolulu*

● *Two thoracic aortic aneurysms—an acute dissecting aneurysm, and a fusiform aneurysm—were both treated successfully with the aid of the pump oxygenator and the femoral-vein-to-femoral-artery technique. The simplicity of this method has been demonstrated in two successful cases at St. Francis Hospital. In most situations calling for the use of partial cardiopulmonary bypass, the femoral-femoral technique would be preferable to a temporary left-atrial-to-femoral bypass.*

SAFE RESECTION OF thoracic aortic aneurysms has required the use of some form of a bypass shunt to prevent cardiac, renal, and neurologic difficulties.^{1, 2} The preferred technique for circumventing the clamped aorta has been a bypass procedure whereby blood is removed from the left atrium and returned by a pump to the femoral artery.^{3, 4, 5} Although this method has been relatively easy to use, the presence of cannulas and tubings in the thoracic operative field, the possibility of postpericardiotomy syndrome, and the somewhat longer time required for atriectomies, have all presented some problems.

It is the purpose of this report to suggest a simpler bypass technique during the resection of descending thoracic aortic aneurysms. A large catheter in the iliac vein and inferior vena cava permits blood to be withdrawn, oxygenated, and then pumped back into the femoral artery. With

this partial cardiopulmonary bypass method, which could be called the femoral-femoral technique, the objections of tubings and cannulas in the chest area, possible postpericardiotomy syndrome, and the extra time spent during atriectomies can be avoided.

CASE REPORTS

Case 1. 62-year-old Chinese man was admitted to St. Francis Hospital on December 4, because of severe anterior and posterior chest pain, not relieved by morphine. Electrocardiograms and enzymatic studies were inconclusive.

He had a history of hypertension, right bundle branch block, two strokes, chronic pyelonephritis, rheumatoid arthritis, cortisone therapy, and pulmonary emphysema.

The pain abated somewhat while he was in the coronary care unit, then returned with moderate severity on December 6 and extended into the upper abdomen on December 7. Oliguria and respiratory infection became apparent.

Surgical consultation was secured on December 7. A thoracic aortogram was done using the Seldinger technique, via the femoral artery. An acute dissecting thoracic aortic aneurysm, extending into the abdominal aorta, was seen. There was narrowing of the true lumen by the opacified false channel, with irregularities of the aortic walls. Increased contrast density of the compressed true lumen as compared to the false lumen was emphasized by visualization of the dissected inner wall, which appeared as a distinct radiolucent septum separating the two channels.

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The pump oxygenator was immediately set up and a medium size Travenol disposable plastic bag was primed with dextrose and water solution. Right brachial artery pressures were monitored with the aid of a Cambridge Multi-Channel Recorder IV. A left thoracotomy incision was made and the proximal descending thoracic aorta isolated. The left femoral vein and femoral artery were cannulated and connected to the pump oxygenator after the patient was heparinized. When the thoracic aorta was clamped and incised distally to the left subclavian artery, it was apparent that the disease also involved the aortic arch. The dissection did not appear to be of the type III thoracic aneurysm described by DeBakey.⁶ Rather than inserting a graft, which would have required further exploration and dissection of the aortic arch, a fenestration reentry procedure was done. The patient was then taken off the pump oxygenator machine and his chest closed. Endarterectomy of his left femoral artery was necessary to permit a good flow of blood to his leg.

Postoperatively, he developed acute renal failure for three days. Then diuresis occurred. Bilateral bronchopneumonia was treated with appropriate antibiotics. Tracheostomy was required for suctioning of secretions and his respirations were assisted by a pressure-cycled respirator because of his weakness.

On December 30, a false aneurysm of his left groin was repaired under local anesthesia. Mild congestive heart failure was also treated. Presumably because of his hypoproteinemia and cortisone therapy, wound healing of the anterior portion of his left chest was delayed. A secondary closure of this area under local anesthesia was required. He did very well, became stronger, and was discharged on February 2.

Case 2. A 68-year-old Japanese man was admitted to St. Francis Hospital on August 5 because of palpitation and a paroxysmal atrial tachycardia. His blood pressure was 120/80. Pulse was 68 per minute. Chest x-rays revealed a retrocardiac mass which was shown by aortography to be a fusiform aneurysm of the descending thoracic aorta.

On August 22 the aneurysm was resected and a dacron graft substituted. Two areas in the aneurysm were thin and ready to perforate. The pump oxygenator was used, with a disposable Travenol plastic bag primed with dextrose and water solution. The femoral vein and femoral artery were cannulated, connected to the heart-lung machine, and partial cardiopulmonary bypass initiated. Right axillary artery pressures were monitored by the Corbin-Farnsworth machine.

The total time on the pump oxygenator was under 25 minutes. Resection of the aneurysm, after preliminary dissection had been carried out, and the insertion of the dacron graft took only 15 minutes.

Postoperatively, he did very well. Hemoptysis did occur, however, on several occasions and, because of the question of pulmonary embolism, the patient was heparinized. Later, he was placed on Coumadin. He was discharged in good condition on September 13. Recent follow-up has shown him to be in good health.

DISCUSSION

Although thoracic aneurysms can be resected and repaired with the help of a temporary left-atrium-to-femoral-artery bypass, the technique of cannulating the femoral vein and draining the inferior vena cava appears to have simplified matters considerably. This femoral-vein-to-femoral-artery bypass has merely been an extension of the bedside cannulations used for cardiopulmonary support in massive pulmonary embolism.⁷

The two cases presented here, both successfully treated, attest not only to the feasibility of using the femoral-femoral technique, but also to its simplicity. Rapidity of cannulation and ease of repair of the femoral vessels are of extreme importance in urgent cases involving trauma or dissection of the thoracic aorta. Dissection in the groin has certainly been far less traumatic than manipulation of the atrium. Furthermore, cannulas within the operative field, and the postpericardiotomy syndrome have been avoided. Oxygenation of the venous blood has been of great help in the hypoxic patient.⁸ Finally, with the use of a Travenol disposable bag, this method can be readily available for the very sick nontransferable emergency cases in even the smaller community hospital. For these reasons, the femoral-femoral technique is preferable to the left atrio-femoral route in partial cardiopulmonary bypasses.

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*A resistant and dangerous infection in burns
can be well controlled by silver sulfadiazine.*

Control of Pseudomonas Infections in Burns with Silver Sulfadiazine

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● *Silver sulfadiazine is an effective topical agent for the control of pseudomonas infections in burned patients as shown by its use on three patients at Maui Memorial Hospital.*

CASE REPORTS

THE PREPARATION and clinical trial of silver sulfadiazine by Charles L. Fox,¹ in 1968, was a step forward in the treatment of burned patients.

In 1964, the mortality in severely burned patients was greatly reduced by the work of two investigators. Col. John Moncrief² at Brooke Army Medical Center began his clinical trials with Sulfamylon and Carl Moyer,³ at Barnes Hospital, St. Louis, Mo., undertook the treatment of burns with 0.5% silver nitrate solution. These were truly milestones in the modern treatment of burned patients. However, mafenide (Sulfamylon) is painful and may cause acidosis, while 0.5% silver nitrate solution stains linens and uniforms and has caused chloride depletion and methemoglobinemia.

Because of the effectiveness of silver nitrate solution, Fox combined silver nitrate with many different antibiotics and sulfa preparations in search of a drug which would improve still further the treatment of burns. Of those tested, silver sulfadiazine was found to be the most effective agent against pseudomonas infection in burned mice.¹ Clinical trials at Columbia Presbyterian, Bellevue Medical, and other centers, and in Vietnam, have shown that silver sulfadiazine is highly effective in controlling pseudomonas infections in the burned patient.⁴

At Maui Memorial Hospital, Wailuku, Maui, I have treated three burned patients with silver sulfadiazine, and found it to be a highly effective agent in the treatment of burns.

Case 1: An eight-month-old Hawaiian boy spilled a pot of coffee on his back and face on January 4 sustaining second degree burns to 15 percent of his body (Fig. 1). The burns were debrided and covered with nitrofurazone (Furacin) gauze dressing. These were changed daily but by the fourth day the child was febrile to 102.4° and cultures taken on this date were later reported as showing pseudomonas. Through Dr. Grossman and the Sherman Oaks Community Hospital, Sherman Oaks, California, a supply of silver sulfadiazine was sent by air freight that evening. On the morning of January 9, the child's temperature was 103°. At 4 P.M. on that date silver sulfadiazine (CF-100) was first applied to the burns, and was applied twice daily thereafter. The mother, who was staying with the child, reported that he was more restful within four hours after application of the CF-100. The following morning his temperature was 101.4° and he was afebrile thereafter. Cultures on the morning following application of the CF-100 showed pseudomonas but all cultures (twice daily) thereafter showed no growth of pseudomonas or other bacteria. At no time were systemic antibiotics given. The burns of the face, neck, and back healed by the twelfth day (Fig. 2).

Case 2: A 52-year-old Japanese man sustained second and third degree burns of his body on January 28 when a fellow worker threw paint thinner onto a fire and the resulting explosion ignited the clothes of the patient. The length of time before the fire was extinguished is unknown. The patient sustained burns of his neck, the left side of his face, the left forearm, the dorsum of the left hand, and the dorsum of the right hand. His abdomen was burned from the rib cage to the pubis. The penis and scrotum had second degree

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FIG. 1.—(Case 1). Eight-months-old boy with second degree burns.

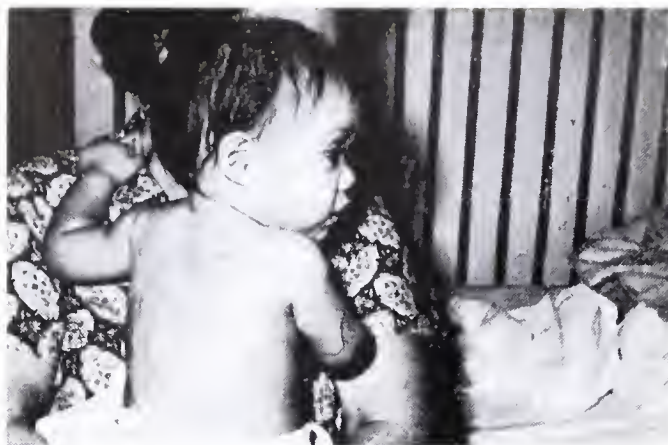


FIG. 2.—(Case 1). Same boy as in Fig. 1, twelfth day of treatment, healed.

burns. Both legs anterior and posterior from the groin to the ankles had second and third degree burns. The only areas that were spared were his right arm, the chest, and all of the back and buttocks. The estimated surface area burn was 51 percent (Fig. 3).

The patient was brought by ambulance to the hospital at 8:30 A.M. IV Ringer's lactate solution was begun. A Foley catheter was inserted. Within one hour, the patient's urinary output was 50 cc an hour and he was therefore taken to surgery, where the burns were debrided. Silver sulfadiazine was then applied to Adaptic dressing which was applied to all burned areas.

The patient's fluid therapy during the first 24 hours was based on his urinary output, which was maintained at 30-100 cc an hour. During the first 24 hours, he received 10,000 cc Ringer's lactate; 1,000 cc of LMD, and 250 cc of albumin. His urinary output during this time was 2,345 cc. The serum electrolytes at the end of the first 24 hours were sodium 144 mEq%, potassium 4.1 mEq%, chloride 105 mEq%. His hematocrit was 58%. During the second 24-hour period, the patient received 5,500 cc of Ringer's lactate, 500 cc of LMD, and 1,430 cc of oral electrolyte solution. This gave a urinary output of 1,525 cc. He received 4,100 cc of Ringer's lactate on the third day and 3,000 cc of Ringer's lactate on the fourth day. After this, the IV fluids and Foley catheter were discontinued.

The dressings to all burned areas were changed daily, silver sulfadiazine being applied to Adaptic which in turn was applied to the burned areas. Only Talwin analgesia was needed and the patient's only discomfort was that of being cold when his burns were exposed. He remained alert and cooperative throughout his treatment time. Daily cultures were taken from both arms, the abdomen, and both legs. All cultures were negative until on the sixteenth post-burn day when two to five

colonies of staph aureus were noted on the cultured plates. However, these increased until by the thirtieth post-burn day many staph aureus were noted on all cultures. At no time was pseudomonas cultured from any of the burned areas. The patient had been afebrile for the two weeks prior to the occurrence of the staph aureus. However, he now began afternoon temperature elevations to 102-103°. Sensitivity reports showed that the staph was sensitive to Chloromycetin. He was therefore given Chloromycetin 0.5 gm q.i.d. with improvement in his over-all condition.

The right hand healed without grafting and without contracture. By the second week, the dorsum of the left hand appeared to be third degree and therefore a "glove-type" graft was applied on February 20, the twenty-third post-burn day. There was complete healing of the skin graft and he now has full function of his left hand. On March 20, the fiftieth post-burn day, the eschars of both legs were debrided with a Brown dermatome. Silver sulfadiazine had still been applied daily to all areas and the eschars remained soft; at no time was there need for an escharotomy.

On March 25, the left leg was grafted with a split thickness graft. Silver sulfadiazine was applied to both the graft and donor areas. On the third post-graft day there was evidence of 95 percent graft "take." The right leg was grafted on the same day and the dressings were changed four days later. However, there appeared to be a 90 percent loss of the graft of the right leg. Cultures of the drainage revealed proteus and a "few" staph. Dressings thereafter were changed daily with silver sulfadiazine and excellent takes were obtained on all further grafting. The right thigh was grafted again on April 7 and April 10, with 100 percent take.

By April 15, all areas were well covered (Fig. 4) and he was afebrile the remainder of his hospital stay. For ambulation, the legs were wrapped



FIG. 3.—(Case 2). Man, 52, with burns of 51% of body surface, on 28th day.



FIG. 4.—(Case 2). Same man as Fig. 3, burns all skin grafted, 90th day.

with compression dressings to prevent venous engorgement of the skin grafts. There has been no evidence of contracture formation of any flexure creases.

The donor areas for the skin grafts were the chest, the back, and the right arm. All donor areas were covered with silver sulfadiazine and this was changed daily. Cultures were taken from many donor areas and all cultures had shown "no growth" for bacteria. The donor sites had remained painless and usually healed within seven days.

The patient was discharged home on May 26.

Case 3: A 51-year-old Puerto Rican man sustained second degree burns of his right forearm and dorsum of his right hand on April 26 when he poured gasoline into a fire in order to "prime the fire." The flame jumped to his arm and he believes that the arm was on fire for approximately 30 seconds. On arrival at the Emergency Room, the burn was debrided and washed with pHisoHex, and silver sulfadiazine dressings were applied. The dressings were changed daily and cultures were taken on each day. All cultures were negative for bacterial growth from April 12 to May 8. No further cultures were taken. On the patient's first post-burn day, he developed a fever to 102.4° orally. There was cellulitis of his right axilla and he was therefore started on cephaloridine (Loridine) 0.5 gm IM b.i.d. This was discontinued seven days later. The burns of the forearm were healed by April 30; however, the burns of the dorsum of the hand required an additional week of treatment. Patient was discharged from the hospital on May 12.

DISCUSSION

Silver sulfadiazine has proved to be an effective topical agent for control of pseudomonas infection in burns. It has now been used in the treatment of over 300 burned patients at different centers⁴

and has been used in the treatment of three patients at Maui Memorial Hospital.

The effectiveness of the agent is due to the slow release of ionic silver and sulfadiazine when in contact with body fluids. The bactericidal action of the silver ion and the bacteriostatic effect of the sulfonamide makes it effective against many organisms, particularly pseudomonas.⁴ The drug is presently supplied in a water soluble base containing 1% silver sulfadiazine. The advantages of this drug over 0.5% silver nitrate or Sulfamylon in the treatment of burns are that it is painless, colorless, and easy to apply, and as yet has shown no adverse side effects. The ointment may be applied with a glove directly onto the burn; however, I have applied it to Adaptic dressing, which in turn is applied to the burn. The areas are then wrapped with Kurlex gauze in order to prevent drying of the ointment. Dressings may be changed daily or twice daily, depending on the culture reports. The water soluble base allowed the eschars on Case 2 to remain moist, and escharotomies on his legs were not necessary.

By controlling the superficial infection, many areas which appeared to be third degree will epithelialize, with skin developing from the hair follicles. This was very evident in Case 2 where the abdomen and anterior thighs were covered by slow epithelial growth. However, false hope may postpone skin grafting needlessly. I would recommend that burned areas that have not shown epithelialization by the thirtieth day be skin grafted.

1827 Wells St., 96793.

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The President's Page



HMA's 114th Annual Meeting starts May 3 with the fishing and tennis tournaments, and ends May 9 with the annual banquet which will be held this year at the Shriners' Country Home at Waimanalo.

Dr. Herbert S. Uemura and his Scientific Program Committee will present outstanding speakers during the four morning and two evening sessions.

For details see the preliminary program which is tipped in on page 302.

E Hele Mai Ika Halawai!

George H. Mills m.d.

Who Needs Public Health?

The health prospects of an individual depend on his heredity and environment. Heredity involves aspects of mind and body; and environment includes psychosocial, physiochemical, biological (injurious life forms, and food), and technological factors. In addition, his health prospects will relate to his education, especially health education; economics; and availability and quality of medical care. These factors are interrelated into a tangled web for individuals and populations.

It is possible to grade the health prospects of an individual. However, these are not static, and he can often move from a lower grade to a higher grade. The heredity of an individual cannot be changed after conception, but it is possible to change an environment which either potentiates or aggravates the unfavorable effects of a hereditary pattern. This requires knowledge and technology, and it is fortunate that much is now available for this purpose, and more will certainly follow.

The over-all health prospects of an individual relate, the world over, to (1) sanitation of the environment in its broadest aspects, including control of infections; (2) good nutrition; (3) the quality of his culture and society; and (4) the availability of a high quality of medical care. In the United States, the medical care system serving individuals is massive, and has daily contact with a large number of individuals representing a large sample of the total population, sick and well. The problems dealt with tend to be immediate and personal.

Problems can be identified which could not be met adequately by the medical care system for individuals, even if greatly expanded. They are: (1) environmental contamination, physical and chemical; (2) trauma due to accidents and war; (3) medical economic inequality (that is, the nonavailability of high quality medical care to many because of the individual's inability to pay, or his place of residence); (4) mass social and cultural maladjustment; (5) inadequate health

education for most individuals; (6) alcoholism and drug addiction; and (7) mental illness in many of its aspects.

Our practitioners of community medicine and public health at present do confront these problems, though ineffectively. If the terms "community medicine" and "public health" have much meaning for the United States, then preventive medicine and political, social, and legislative action are proper concerns for the profession of medicine. The most immediate requirement before us is to stop assessing our needs in relation to the direction technology and organization appear to be leading us; but more affirmatively and less passively to satisfy our needs by appropriate use of organization and technology to carry us in the direction we plan to go. The goals and the means must conform to our constitutional democratic government and its stated values.

The present high quality of the personal medical care system in the United States should be protected and improved, with increased emphasis on preventive medicine. The community health system needs an infusion of personnel and authority, plus the active goodwill and cooperation of the more massive medical care system. The work of providing good health care requires the services of community medicine and individual medicine.

The public health system has not been adequately developed at the city, county, or state levels. I believe it should be strengthened. A modern, technically advanced nation should provide considerable resources for preventive medicine. This means a larger development of community medicine. It definitely means an active participation of all physicians in the political and social life of the community with the intent to guide changes to promote health. Change there will be! Fortunately, the guideline for physicians is crystal clear. Change is best when it can promote the health prospects of all people, of all individuals.

ROBERT G. WEINER, M.D., M.P.H.

The Hawaii Medical Care Quality Study

Beverly C. Payne, M.D., a 1942 graduate of the University of Texas Medical Branch, Assistant Professor of Internal Medicine at the University of Michigan and Assistant Dean there since 1966, has come to Hawaii at the invitation of the Hawaii Medical Association to make a long-term study of the quality of personal medical care in Hawaii. In private practice three-quarters of his time, yet with distinction as a consultant to the Medical Care Division of the USPHS and to the Department of HEW, the Health Insurance Association of America, and the JCAH, he is extraordinarily well qualified for this undertaking. Here he introduces our project to us.

Medicine is a proud and responsible profession—proud of its heritage of service and high principle, and responsible in commitment to the continuing education of its members and to the community which it serves.

Now comes a testing of these cherished and stated ideals. Not a testing by individual patients, but a questioning by equally responsible agencies of the public interests—by government, by third party payers of medical costs, and by consumer interests. These parties want the multi-billion dollar health care industry to demonstrate an equitable distribution of medical care and a high level of quality. Through slightly clenched teeth they also add that costs should be controlled.

It is ironic that the one profession deeply engaged over a long period of time in continuous self-appraisal should be the present target of such bitter criticism. It is, therefore, more commendable that the physicians of this community should respond in such a positive manner to provide such assurances.

The response of the Hawaii Medical Association has been a self-conscious exploration of the extent and depth of its organizational responsibility and a deliberate acceptance of the hazards attendant upon a scientific inquiry into the present level of quality of personal medical care available in these islands. This led to the preliminary study by Dr. Paul Sanazaro, published in the HAWAII MEDICAL JOURNAL in July-August, 1968. A firm recommendation of that study was that a definitive measure of quality of care should be undertaken. We are in the process of implementing that recommendation.

I have come here with a team, at the request of the Hawaii Medical Association, to study the quality of personal medical care as delivered in the physicians' offices and in the general short-term

hospitals in the State of Hawaii. The study is based on the assumption that peer judgment, as expressed in criteria for optimal care for 16 diagnoses, will permit such an evaluation. These 16 diagnoses represent 25% of the care in the hospitals of Hawaii and all the major medical specialties. The criteria, developed by panels of Hawaii physicians, will be applied to a selected sample of hospital cases from 22 short-term general hospitals. Access to the office records for pre- and posthospitalization study of these same cases is planned. Approximately 3,000 cases will be studied.

A second phase of the study will involve diagnoses or conditions expected to reflect office care only. For this, 145 physicians involved primarily in care of ambulatory patients will be selected.

It is expected that the major data-gathering phase of these studies will take place over the next four or five months. An initial reporting of results of the study will be made to several hospitals in June. Follow-up observation and explorations will continue over the next two years in these selected hospitals. Because of the volume of data and the need for precision in appraising them, no general report will be available until late in 1971.

Obviously, a maximum of good will and cooperation from the physicians of Hawaii is necessary. It would be impossible to accomplish even a much less ambitious goal without the total commitment of the hospitals and the physicians. I hope to achieve this level of cooperation.

The results of this study have national significance. It is the first such statewide study of quality of medical care. It is the first such study of office medical care. It may well produce the data upon which policy decisions are made concerning the future methods of quality of care appraisal. My expectations are high as are your own.

BEVERLY C. PAYNE, M.D. ■



Hawaii Academy of General Practice

DOWN UNDER

It is of interest to physicians in Hawaii to cast an eye upon our Pacific neighbor. Australia, with only 12,000,000 people on the world's largest island (or smallest continent) is the only English-speaking nation in Asia.

Their AMA (Australian Medical Association) has recently been in the throes of a controversy over "the common fee." We call it the "usual and customary" fee, loosely synonymous with "reasonable fee." Leave it to the British (except that Australia is hardly British) to choose a precise single word: "common," as in common denominator.

The controversy has been with the Royal College of General Practitioners (a title enough to make any GP raise his head in pride!). The latest word is that their difficulties have been resolved, and a united medical front will be presented to Dr. Forbes, the Australian Commonwealth Minister of Health. However, out of some 7,000 GP's in Australia, a dissident group of 600 GP's—calling themselves the General Practitioner Society—is holding out and objecting to the establishment of a common fee. They will be given short shrift.

The Government seems determined to respond to public pressure by keeping its election promises. It is introducing a reconstructed medical benefits scheme, seeking consumer satisfaction by zeroing in on the difference between what the combined benefits (Commonwealth Benefit—governmental, and voluntary insurance "funds") pay, and what physicians charge. The "common fee" is an attempt to peg the maximum charge, i.e. put a lid on out-of-pocket expense to the consumer. The Government, as you can see, is not doing it as we do here in the USA—have the Congress pass a law—but by negotiations with their AMA.

Does not all this sound rather familiar in terms of our own national and local medical economics problems? But read on:

The Australian Commonwealth's objective is to fix the out-of-pocket difference at 80¢ in the case of a visit to the GP doctor's surgery (office, to you). The allowed difference is to be \$1.20 in the instance of a GP's house call, and a maximum difference of \$5.00 in other services by specialists outside the hospital (\$1.00 = US \$1.12).

Here are some illustrative items: In suburban Sydney, you, the patient from a high middle-income bracket, are charged \$3.80 for a first or subsequent office visit by a GP. The Commonwealth Benefit will refund you 80¢ and MBF (Medical Benefits Fund of Australia, Ltd.), one of the voluntary insurance plans, will refund you \$1.40. Therefore, you will be out of pocket \$1.60, or a little less than half the GP's charge.

A specialist, to whom you can go (without penalty) only on referral from a GP (AAGP members please don't make a mad rush to medical utopia!) charges ordinarily about three times as much as a GP for a first visit, reducing his fee by a third for all subsequent visits. The Government's contributions are \$2.50 and \$1.20 respectively for such visits, while MBF, for example, pays \$4.20 and \$2.20 towards them. Thus, on a first visit to a specialist who charges you \$11.00 or \$12.00, you are out o' pocket \$4.30 or \$5.30, which is considerably less than half the fee. The penalty for going "unreferred" is a reduction of about a third in benefits from both Commonwealth and Funds.

What would such partial indemnification cost you? The Commonwealth Benefit comes out of your tax dollar. For medical benefits alone (excluding hospital coverage) but including a schedule of surgical operations, you would pay \$15.60 if you were single, \$31.20 for a family including all children under sixteen, per annum as a premium to a voluntary insurance plan.

There is more to this than what I have reported. "Down under" physicians live well for reasons other than professional income. However, we should feel a pang of sympathy for their AMA members for what seems obviously to be a squeeze put on by consumers, via government, who are not about to accept an increase in taxation in order that the Commonwealth Benefit can subsidize more generously. The Government will be applying the pressure to make the doctors subsidize medical care. Imagine squeezing the measly \$1.60 out o' pocket for a visit to your GP to 80¢, thus reducing his total fee to \$3.00!

Beware! The first step, obviously, is to institute the common fee—the LOWEST common denominator—our reasonable, usual, and customary fee!

J. I. FREDERICK REPPUN, M.D. ■

Periodic Health Examinations

The American public and politicians are becoming increasingly concerned about the availability and delivery of medical care to the sick. Perhaps critical appraisal of one of the sacred cows of North American medicine, the "periodic health examination," might have some bearing on this problem.

As far as I am aware, there is little or no true evidence that these examinations have prolonged the life of the general population. Meanwhile, they are expensive and time-consuming, and keep the physician away from what must be his primary concern: the treatment of sick people. This situation particularly affects the patient who suddenly becomes acutely ill. Unable to see his own doctor, who is busy doing routine physicals, the unfortunate sufferer may be forced to seek help from a strange physician at the hospital emergency room, or other acute care facility.

Not only do these routine examinations afford no demonstrable benefit, while at the same time keeping physicians from looking after sick patients, but they can in many cases be actually harmful. A few excerpts from a recent letter to the *Lancet* by Dr. Keith Morgan of West Virginia will serve to illustrate this point:—

"A discussion of all the possible unfortunate consequences of the 'annual fiasco,' a term I prefer to 'annual physical,' would require a monograph. I shall, therefore, limit myself to calling your attention to the hazards of the routine electrocardiogram. The dangers of this examination are several and many a healthy man has been turned into a cardiac neurotic simply because at the time of the examination he had transient abnormalities of his T waves. Death due to electrocardiography is unusual but has been reported. On the other hand morbidity is commonly produced. Indeed, Marriott coined the term 'electrocardiographogenic disease.'

"Finally, I would question the state of mind which allows so much time, effort, and money to be expended on a ritual which has so little to recommend it."

Responsibilities of the Physician

In discussing the physician's responsibilities with a freshman class of medical students, Dr.

Solomon Papper of Miami, Florida, speaks first of his responsibility to the patient:

"This area of commitment has the highest priority, and supersedes, but does not preclude, other obligations. When we assume responsibility for the well-being of another person, all other responsibilities must be placed in the background. What is the nature of this particular area of obligation? What must we do to meet our responsibilities? We must be able to provide the patient with diagnosis and treatment based on a sound knowledge of total human biology encompassing physical, emotional, and social factors that are relevant to the particular situation.

"It is clearly not enough to be capable and knowledgeable in the area of making the right diagnosis while ignoring the patient as a person. Surely disease would be an abstract notion of little interest to most of us in this room if it did not occur in people. On the other hand, it is not enough to be a kind, considerate, compassionate physician who holds the patient's hand while he or she dies of a curable form of disease because the physician did not suspect the right diagnosis.

"It is our responsibility to provide knowledge and skill in the total sense, including a consideration of physical, emotional, and social factors. But the body of knowledge is so vast that none of us can possibly hope to master it all. Therefore, we are also committed to our patients to know what [it is that] we do not know, and to ask for help under these circumstances. Not to recognize one's limitations is a serious matter, but to recognize them and not act accordingly is an unforgivable testimony to personal vanity. It has no place in medicine.

"We are also committed to all patients and it is not for us to pass judgment on the worth of a man; it is not for us to compare the value to society of the prominent business executive with [that of] the skid-row alcoholic. In our relationship it is important that we know and understand each of them as people who are in need. Prejudices of all kinds exist in most of us, racial, religious, moral, social, geographic, economic, sexual, or what have you. They have no place in medicine. Each man must be served with dignity." ■

W. PHILIP JONES, M.D.



University of Hawaii.....

On February 23, 1970, **Robert Sudrann, M.D.**, director of the UH School of Medicine's residency training program in Okinawa, and **Col. Robert Jensen**, chief of the Health, Education, and Welfare branch of the U.S. Civilian Authority, Ryukyus, reported to the Okinawa Advisory Committee, chaired by **Edward Yamada, M.D.**, at the University of Hawaii (Leahi) Hospital. Hopes that our valuable training program could continue full steam ahead until Okinawa reverts to Japan in 1972 are dimmed by severe budget cuts in the Department of Defense. Col. Jensen is going to Washington to seek nondefense funds to continue the residency training program. Any reader who is interested in having American-style medicine taught in Okinawa, please write your Congressman. **Hong-Yi Yang, M.D.**, assistant professor of pathology, spent six weeks at the Okinawa Central Hospital during December and January.

Merle Ansberry, Ph.D., chairman of the division of speech pathology and audiology, was recently elected to the Legislative Council of the American Speech and Hearing Association. He was the Association's delegate to the Pan-Pacific Conference on the Education of Handicapped Children held in Honolulu February 3-6, 1970.

On January 1, 1970, **Neal L. Gault, M.D.**, assumed the chairmanship of the Department of Medicine, succeeding **Richard Blaisdell, M.D.**, who has guided the Department for three and one-half years. Dr. Blaisdell will give his full attention to teaching and hematology research.

Edith H. Anderson, Ed.D., dean of the School of Nursing, was called to testify before the U.S. Senate subcommittee considering appropriations for the Department of Health, Education, and Welfare. Her subject was professional health manpower. **Mrs. Cynthia G. Aiu** has been appointed assistant dean of student services, replacing **Mrs.**

Yukie Gross, who has assumed responsibility for a newly established Master's degree program in community health nursing.

Wendell Hoshino, D.D.S., and **Raymond Tanaka, D.D.S.**, have been appointed assistant professors of dental hygiene. Dr. Tanaka will develop a program in gerodontology at the Leahi Hospital.

The Department of Psychiatry has embarked on a joint residency training program including the University of Hawaii (Leahi) Hospital, Queen's Medical Center, Hawaii State Hospital (Kaneohe), and the Preventive and Clinical Services Branch, Mental Health Division, State Department of Health. An intensive three-year curriculum has been defined.

On February 16, 1970, the School of Medicine hosted President Harlan Cleveland and Vice-President Richard Kosaki to an evening of informal discussion related to the future of the School. Dr. Cleveland heard presentations by **Geoffrey Ashton, Ph.D.**, on preclinical medicine, by **Scott Halstead, M.D.**, on tropical medicine, by **Kenneth Gardner, M.D.**, on student affairs, and by **Robert Noyes, M.D.**, on clinical contributions to the Hawaii community. The president expressed appreciation for this briefing and suggested that a thorough assessment be made about the needs for an M.D. program, perhaps one that could be completed in three years instead of the traditional four. He suggested that perhaps a person such as Robert Morrison, formerly with the Rockefeller Foundation, could act as consultant on such a survey. Finally, Dr. Cleveland related conversations he recently has had with Clark Kerr, previous president of the University of California, to the effect that health sciences will be the central focus of university development in the latter quarter of the 20th century. ■

ROBERT W. NOYES, M.D.

• Chief complaints of this 47-year-old Caucasian farmer were:

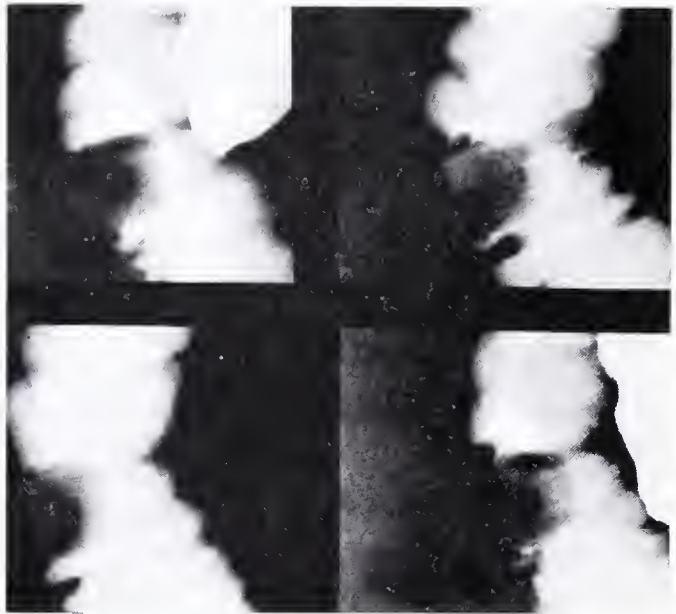
1. Increasing constipation for several months.
2. Frequent rectal bleeding for two weeks.
3. An eight-pound weight loss within two weeks.

• Sigmoidoscopy to 25 cm was normal except for slightly engorged hemorrhoidal veins.

• Roentgenographic examination of the colon by barium enema reveals a tumor.

• What is your diagnosis?

• Answer is below.



The preoperative diagnosis of benign lipoma was correct. Smooth, well-defined margins, relative radiolucency, slight mobility, and changeable shape with pressure, noted during fluoroscopy, are characteristic features of a submucosal lipoma. Mucosa was intact over the tumor. Numerous diverticula were within the segment of resected sigmoid and distal descending colon. The origin of rectal bleeding was not localized with certainty but this has not recurred.

Submitted by the
RADIOLOGICAL SOCIETY OF HAWAII
ROBERT G. RIGLER, M.D. ■



Dozens of reports from the many active HMA committees, and at the critical period, I was laid up by a motorcycle accident yet! Received late . . .

The **Workmen's Compensation Committee** has persuaded Mr. Hasegawa and the insurance carriers to go along with usual-and-customary fees, but the parties are still negotiating on how to ascertain the same. HMA has the means for gathering the info, but who is to pay for the cost needs to be answered.

The **Legislative Committee** received a report from Rep. Loo that HMA should not expect to get any measures through this session. Bills were drafted on malpractice situation (similar to proposals in California), anyway, but not introduced.

The **Bylaws and Parliamentary Committee** is proposing bylaw changes to allow full membership in HMA to interns, residents, and medical students.

The **Medical Practice Act Committee** held a lengthy discussion on osteopaths, including evaluation for staff privileges, examinations, reciprocity, etc. How do they, and should they, fit into the medical picture here? Also discussed were recruitment problems of the Department of Health. The survey of the one-year residency requirement gave a 346/257 preference for retention.

The **Careers Committee** had its much expanded Health Careers Day February 18, at HIC. More than 20 organizations cooperated and almost 1,000 students attended the day-long session. The evening session attracted 260 people.

The **Bureau of Research and Planning** received reports on plans for Dr. Payne's study, as recommended by the Sanazaro report, on quality of outpatient care in Hawaii. Dr. Payne arrived March 1 with five staff members, although full funding still was not worked out at last report. Dr. Cutting is providing a cottage at Leahi for headquarters. A group of local physicians and lay people, headed by Richard Mamiya, was named to advise.

A **Drug Abuse** seminar held on January 17-18 was felt to be successful, although only 34 HMA

physicians, and 15 other physicians, were in the audience.

The **Medical Care Plans Committee** discussed peer review committees and recommended that they be appointed in each county, be compensated, and be available to anyone with grievances. If grievances cannot be settled on the county level, the case is to go before an HMA State Committee on Peer Review, to be formed.

The **Communicable Disease and Immunization Committee** voted to support the State TB program. Support was also voted for a program outlined by Dr. Hirschy for mass rubella immunization in public and private schools. You will be asked to help.

The **Quackery Committee** after a lengthy discussion on Scientology asks for your opinions as to whether you feel the activities of this group touch on the practice of medicine. Is Scientology quackery?

The **TV-Radio Committee** had a critique session to try to improve programs.

The **Message of the Month Committee** heard complaints that their newspaper insertions were hard to find, looked like advertisements, were poorly placed, etc. They are working for improvement.

The CHP Committee on Manpower met with the **Medical Practice Act Committee** on the question of whether changing the licensure laws might help the medical manpower situation and medical costs. Dr. Tomita stated that even if we changed the laws to get more physicians to practice in the State, we would still have a shortage of physicians in the rural areas, stressing that the cities have enough physicians. Others suggested that unlicensed physicians be allowed to work for the government, to ease their manpower problems. Others opposed the residence requirement, feeling licensure should be based on competence alone. Reciprocity questions and the method of examination and grading were discussed. ■

JOHN BROWN, M.D.

This is the eighty-third installment of In Memoriam—Doctors of Hawaii.

Mitsuharu Hoshino

Mitsuharu Hoshino was born in Honolulu on April 29, 1897, the son of the late Eiichi and Suga Hoshino.

He received his elementary education at the Central Grammar School. Upon his graduation from McKinley High School in 1915, he entered the University of Texas from which he received the degrees of B.S. in Medicine in 1919 and Doctor of Medicine in 1920. He served his internship at the City Hospital, Nashville, Tennessee, in 1920 and at St. Vincent's Hospital, Norfolk, Virginia, in 1921.



DR. HOSHINO

Later he did advance work at the Post Graduate School of New York.

Dr. Hoshino was granted his license to practice medicine and surgery in 1921. In 1923, he began his medical practice in Honolulu. He was on the staff at Queen's, St. Francis, Children's, Kapiolani, and Kuakini hospitals and served as president of the medical staff at the Kuakini Hospital in 1950.

In 1931 and 1932, he served on the Milk Commission on Oahu. He was director of the Oahu Tuberculosis Association in 1939 and 1940. During World War II, he was medical examiner for Local Board No. 7, Honolulu, of the U.S. Selective Service System from 1941 to 1925.

Dr. Hoshino married Miss Helene Tsuruyo Morita of Honolulu in 1931.

He was a member of the American Medical Association, Hawaii Medical Association, Honolulu County Medical Society, a life member of the Queen's Hospital, and an honorary life member of Kuakini Hospital. He was also a member of the Makiki Castle Church.

Dr. Hoshino died on May 29, 1956, in Honolulu at the age of 59.

Dr. Hoshino had the distinction of being the first American doctor of Japanese ancestry to practice in the Hawaiian Islands.

There was nothing he enjoyed more than traveling with Mrs. Hoshino, which he did frequently and extensively, always including visits to clinics and hospitals in his itinerary.

Ernest Frothingham King

Dr. Ernest Frothingham King, a native of Maine, received his M.D. from Howard University, Washington, D.C., in 1883. On obtaining his degree, Dr. King went into practice in Washington where he was on the staff of the Charity Hospital and from 1894 to 1897 was in charge of the women's ward at the hospital.

Dr. and Mrs. King came to Honolulu aboard the "Mariposa" September 23, 1897, in the hopes that the climate would prove beneficial for Mrs. King. Locating at Hotel and Alakea streets, Dr. King opened an office, where he limited his practice to diseases of women. In 1899 the doctor was appointed government physician for Waimea, Kauai, and also served as physician for the Makaweli and McBryde plantations. After three years on Kauai he left the islands in February, 1901.

After a round of visiting on the mainland, Dr. King went to Vienna for special postgraduate training. On his return he located at Washington, D.C., where he specialized in genitourinary cases. For 15 years he was connected with the Emergency Hospital, and from 1911 until his death he served as director of the clinic and dispensary there. When the new Emergency Hospital was built on New York Avenue, Dr. King was one of the men most instrumental in its construction. The doctor also held the post of associate professor of surgery at George Washington University.

On June 8, 1916, Dr. King died in Washington at the age of 60. He was survived by his wife.

He was a member of the American Medical Association, the American Urological Association, Sons of the American Revolution, and the Benjamin B. French Lodge, No. 15, F.A.A.M., and was a past high priest of the Lafayette Chapter, No. 5, Royal Arch Masons. ■

★ **Physiology of the Human Kidney**

By Laurence G. Wesson, M.D., 712 pp., \$34.00, Grune & Stratton, 1969.

IN 1951, Homer Smith published his now classic text on the physiology of the kidney. Now, all serious students of renal physiology must purchase this outstanding new edition by Dr. Wesson. This book is a detailed reference text which updates Dr. Smith's earlier work. Notable additions are on the erythropoietic function of the kidney (Dr. Erslev), the renin-angiotensin system (Drs. Mulrow and Goffinet), and renal enzymes. Missing from this reference is the chapter on comparative physiology.

This book is well organized and effectively indexed with voluminous references. In addition, at the end of each chapter are listed pertinent review articles. This book should be added to the library of all who are deeply interested in renal physiology.

ARNOLD W. SIEMSEN, M.D.

Wine and Health

Edited by Salvatore Pablo Lucia, M.D., 85 pp., \$5.95, Pacific Coast Publishers, 1968.

THIS RECORDS the proceedings of the first International Symposium on Wine and Health held in Chicago, November 9, 1968; but more than that, it represents the personal interest of Dr. Lucia in the use of wine in the practice of medicine. He describes wine as having a definite place in any physician's practice, and documents the physiological and psychological responses to wine. He points out that wine is far more than a mixture of alcohol and water, and thus it is not surprising that there would be a different biological response to alcohol consumed as a glass of red burgundy or as a highly purified 8:1 vodka martini on the rocks. Dr. Lucia's book is well worth reading. One is rewarded by his expressive style and the reminder that in this day of wider and wider use of a broad spectrum of over-the-counter and under-the-counter psychedelic and hallucinogenic agents, we still have that oldest potion, which Plato vowed that Dionysus gave to men "to lighten the sourness of old age, so that youth could be renewed, and sorrows forgotten."

RICHARD R. KELLEY, M.D.

★ **The Practice of Refraction, 8th Ed.**

By Sir Stewart Duke-Elder, G.C.V.O., D.Sc., Ph.D., M.D., F.R.C.S., F.A.C.S., F.R.A.C.S., F.R.C.P., F.R.S., 329 pp., \$11.75, The C. V. Mosby Company, 1969.

THE EIGHTH EDITION of this textbook is written on the same framework as previous editions and, to me, it does not justify another edition. Although the book is brought "up to date," with some better pictures replacing older ones, the general structure of the book has not changed. For instance, the chapter on myopia does not mention the benefit of contact lenses in its management. Likewise, the chapter on contact lenses devotes more space to the scleral type of lenses instead of more frequently used, smaller, corneal type of lenses. No mention of the soft contact lens is found, a lens type that has been used in European countries for the past five or more years. The text, however, still serves as a good source book for one beginning the study of refractions.

WAYNE WONG, M.D.

★ means highly recommended.

Modern Psychoanalysis of the Schizophrenic Patient: Theory of the Technique

By Hyman Spotnitz, M.D., Med. Sc.D., 234 pp., \$7.75, Grune & Stratton, 1969.

THIS BOOK attempts to illustrate how the standard techniques of classic psychoanalysis may be applied to the therapeutic management of schizophrenic patients. The first five chapters have to do with concepts of schizophrenia and basic theory of treatment technique. The remaining five chapters, more clinically oriented, deal with such fundamental phenomena as resistance, transference, countertransference, and interventions. I found the various types of interventions to be extremely interesting. In fact, one of the strengths of the book is that the author offers many novel approaches to patients who we ordinarily would consider too fragile for such maneuvers. I had the same feeling also about the author's suggestions on how to influence resistance patterns.

In discussing the shift from rudimentary to cooperative relationships, the author includes a section on financial transactions. It was my impression that many schizophrenic patients would be unable to pay for extended private psychotherapy because of the inroads the illness has made into their productive capacity. The insistence on classical psychoanalytic rules about financial transactions may be a little too strict here.

The book has a list of 117 references, and a separate very helpful section on suggested readings (chapter by chapter), closing with the usual name index and subject index. All in all, this is a useful text for the review of psychoanalytic technique applied to schizophrenic patients. It also includes some up-to-date material on modern neuropsychological theory and communication dynamics.

WILLIAM CODY, M.D.

Atlas of Radical Pelvic Surgery

By James H. Nelson, Jr., M.D., 256 pp., \$22.50, Appleton-Century-Crofts, 1969.

WRITTEN BY ONE OF THE HEIRS-APPARENT to the leadership of the subject surgical subspecialty, this volume is artfully bound, concisely presented on good paper stock, and reasonably priced at \$22.50. The author writes with the authority of a rare breed of gynecologic surgeon—one who performs all aspects of pelvic surgery, from bladder through uterus to bowel.

This atlas is the first such publication devoted entirely to the surgical therapy of gynecologic malignancy, more specifically carcinoma of the cervix and vulva. The philosophy permeating this offering is one which we might hope should dominate the therapy of malignancy as a whole—that is, to tailor the treatment to the severity of the lesion. The author avoids dogma by acknowledging the place of radiotherapy: "We feel strongly that the old argument of surgery versus radiation is outmoded and a waste of time. Both methods of treatment must be available. . . ."

The presentation is logical and well documented with excellent line drawings. Twenty-five percent of the atlas is devoted to pre- and postoperative care, an aspect of the practice of surgery too often forgotten in the zeal to become known as "the fastest knife around." Especially solid are the 21 pages on postoperative care, documented by a bibliography of 158 references.

This atlas is not for the majority of gynecologists. On

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Carl W. Boyer, Jr., M.D.

Queen's Medical Center
P. O. Box 861
Honolulu, Hawaii 96808
RADIOLOGY
Jefferson Medical College—1955
Internship—Allentown General
Hospital—1955-1956
Residency—Walter Reed General
Hospital—1958-1961



Raymond W. Brust, Jr., M.D.

640 Ulukahiki Street
Kailua, Hawaii 96734
RADIOLOGY
Jefferson Medical College—1956
Internship—Tripler U.S. Army
Hospital—1956-1957
Residency—Mercy Hospital,
Pittsburgh—1959-1960
(neurosurgery)
Mercy Hospital—1960-1963
(radiology)
Neurological Institute—1968-1969
(neuroradiology)



Jehu Mathews Robison, Jr.

Maui Mental Health Center
Department of Health
Wailuku, Maui 96793
PSYCHIATRY
Baylor University College of
Medicine—1956
Internship—University of Texas
Hospitals—1956-1957
Residency—University of Texas,
Baylor University—1957-1960



Friedrich Fritz Maag, M.D.

P. O. Box 188
Kaunakakai, Molokai 96748
DERMATOLOGY
University of Zurich—1956
Internship—District Hospital Samedan
GR, Switzerland—1956-1957
Residency—E. J. Meyer Memorial
Hospital, Buffalo, N.Y.—1959-1962
The Queen's Hospital—1962-1963
Tufts University Medical School—
1963-1965
The Queen's Hospital—1965

County Society News

Hawaii

The HMA president and president-elect were guests at the January 16 meeting. During the business session it was voted to explore methods of encouraging physicians to establish practices in the county. Dr. Donald Char will be invited to a meeting to discuss plans for a Student Health Service on the Hilo Campus. Action on Act 97 hospitals was deferred. Dr. Mitchel was appointed to obtain the names of five students to attend the HMA Careers program. The Society will pay the cost of their air fare. The name of Dr. David Jones as Councillor from Hawaii will be submitted to the HMA Nominating Committee. The 1970 Diabetes Survey was announced. It was proposed that a letter be written to the HMA requesting a feasibility study to establish a State Committee on Ethics.

Forty people attended the February 20 meeting, including a number of nurses. Dr. John R. Stephenson spoke on drug abuse and showed a film entitled "Why Must the Flowers Die?" He urged the County Society to take the lead in establishing a local task force to study the problem of drug abuse and to develop programs to combat it. The business meeting followed this presentation. The president reported that letters had been sent to legislators in support of a cobalt unit at the Hilo Hos-

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Dialogue Overheard in the HMA Office

On learning that the HMA-sponsored European charter flight was for attorneys and physicians only, staff member Becky Kendro asked **George Goto** if she could go along as his daughter. George (who is rather diminutive beside our towering Becky) replied, "Heck, people might think I was your son."

Lee McCaslin uses the *Random House Dictionary* and *Ted Tsen Dorland's*. Recently during a friendly verbal joust in which Ted successfully challenged her, Lee admitted, "That's a blot on my *escutcheon!*" Ted countered by recommending that she look up the word in a medical dictionary. Lee did and blushed forthwith a dark red color matching the cover on *Dorland's*. . . . Touché!

Life in These Parts . . .

Critic **George Suzuki**, commenting on the sometimes rather off-color jokes carried in our Notes and News, remarked, "No wonder the JOURNAL comes in a brown 'tissue' covering."

We inquired of **Mort Berk** (HMA tennis trophy winner of several years ago) if he was ready for the forthcoming tournament in May. Mort, who has been tied up with meetings, commented ruefully, "Everything's fine except for my overhead, forehand, backhand, serve, and net game. . . ."

Walter Yokoyama recently moved to Waikiki, taking over **E. R. Austin's** practice. One day recently he entered one of his examining rooms and the patient looked puzzled at Walter's handsome young face, jumped off the examining table, and walked out with the comment, "Say, you're the wrong Dr. Yokoyama." To add injury to insult, the patient returned shortly to have his parking ticket validated. But then, we can't win 'em all. . . .

Conference Humor

During the Children's Hospital noon conference, **Windsor Cutting** was enumerating the community activities of

the U of H Medical School. He related how he became a member of the Governor's Committee on Alcoholism. "Someone from the Governor's office asked me how I felt about alcoholism and I answered, 'I'm for it,' and next thing I knew, I was on the committee." Medical director **Harry Shirkey**, who is concerned about public images, worried about any misconceptions the Woman's Auxiliary may acquire. . . .

David Allan, a stout, mustachioed pulmonary specialist from Children's Memorial in Chicago, lectured on acute respiratory failure in precise King's English and with subtle English humor. He maintains that "the IPPB is an admission of the inadequacy of a hospital's respiratory department. We have a saying that 'IPPB is ten dollars a throw.'" (Whatever that means.) After a respiratory physical therapist had demonstrated her technique of percussion and vibration methods, which seems to require some effort, **Wilfred Miyahira** asked, "Don't you think a mechanical vibrator may be more effective in the case of an ultra-small therapist?" Dave admitted, "Since I deal with children. I have never seen an ultra-small therapist. Anyway, I have found that women are not as weak as they pretend to be." Wilfred wondered, "What if the patient is ultra-big?" The discussion then revolved around infections in ICU's and the necessity for one man with iron discipline to be in charge. Dave says that "Democracy is all very well, but when the chips are down, dictatorship works better."

Stuart McIntyre Finch, an intense, close-cropped, low-voiced, brilliant speaker from the U of Michigan Mental Health Team, discussed the psychiatric aspects of cardiac transplants at a Queen's conference. We learned that patients apparently vary in their attitudes towards the donors. Some want to know everything about the donor and others want to know nothing. They all realize that someone had to die for them to get a heart. **Marie Faus** was curious: "Does religion have anything to do with heart transplants?" "No, except in one recipient who felt he should become Jewish, since he had received a Jewish heart." Someone asked, "What is the patient's reaction to CCU?" Finch told the story of **Raymond Waggoner**, chief of psychiatry at U of M, who on the second day of his coronary, started psychotherapy on the patient

RUDOLPH W. BENZ, M.D. 1886-1969

Rudolph W. Benz was born on April 26, 1886, in Sydney, Australia. He received an engineering degree from the Sydney Technical College in 1905. Following this he came to the U.S. and received his medical degree from the University of Pittsburgh in 1910. He interned at the Allegheny General Hospital, where he met Viola Mitchell, R.N., whom he married in 1911. He returned to Australia in order to see his parents, and planned to stop off in Hawaii for two weeks on his way back. He missed too many boats and instead went into practice here with Dr. C. B. Cooper. This partnership lasted for ten years. He then opened up his own office on Beretania Street, where the new capitol now stands. He had a general practice but his chief interest became traumatic surgery. In

1935 he took in Dr. Rodney West as a partner and this lasted until Dr. West went into the service in 1941. Dr. Benz retired from active practice in 1950, after which he worked for two years in the Honolulu Blood Bank.

Dr. Benz had two children, Helen (Mrs. Mills S. Savage) and Jack (deceased). He is survived by his wife, his daughter, and eight grandchildren.

Dr. Benz was very interested in music and art, and did a considerable amount of painting during his latter years. He would often sketch his patients while taking a medical history.

He was a member of the Honolulu County Medical Society, the Elks, the Aloha Shrine, and the Honolulu Academy of Arts. He died at home on June 27, 1969.

RODNEY T. WEST, M.D.

in the next bed. He was handling the situation in the way he was best suited and the patient getting the psychotherapy appreciated it, but Ray had to be transferred to a private room. . . ."

Rees B. Rees, a tall, lean, kindly, humorous professor of dermatology from San Francisco's UC Medical Center, discussed drug reactions. Regarding penicillin reactions, he commented, "I never give penicillin. . . . There are over 300 reported deaths from penicillin reactions. But of course, I got this from an English textbook, so it may not be reliable." When the slide projector balked, Rees offered, "I may have to do a soft shoe." Regarding gold reactions, he related how a fellow dermatologist who knew what to do, but wanted him to do it, sent him a case. "I gave the patient a shot of BAL and sure enough, on the way home, she had to stop at the Emergency because of a febrile reaction, but then the rash got better." Rees finds that LE reactions from degraded tetracyclines happen to physicians' families, who tend to store away samples like pack rats and use them ten years later. **Dan Palmer** asked, "How about the use of penicillin in exanthem reactions?" Rees replied, "I would, if the exanthem is due to syphilis." With this, he told the story of a colleague, a rather sensitive type, who shook hands vigorously with a patient who was later found to have syphilitic lesions of his hands. The colleague was so shook up that he had to have a Bicillin injection for his nerves. "I learned this only because he developed a pronounced limp." **Claude Caver** asked, "Would you give a challenging dose to test a possible drug reaction?" Rees was quite specific, "My old professor used to say, never take a chance."

Travelers . . .

We chatted with traveler-writer-scholar extraordinary **Kazuo Miyamoto**, who recently retired from medical practice to devote full time to a long-cherished career of

traveling and writing. Only last summer, he had returned from an African safari and then he was off again in December on a two-month trip to the Far East including a month spent in India with 26 Buddhist scholars from Japan. He effused, "I have never been on a trip so fascinating. . . . It is something to brood and think over. . . ." Included in his itinerary were a tour of Bihar province, where there was a resurgence of religion over 2,500 years ago, and a visit to Buddha's birth place and to Ghandi's village. Never one to return empty-handed, Kazuo brought back reams of color film, tape recordings of his impressions and a bad cold which he refused to nurse (typical of a doctor, eh?).

Elected, Appointed, Honored

Dashing Kailua physician **Bob Chung** may have been elected chairman of the Police Commission because he helped Kailua police apprehend teenage car thieves last Christmas Day. Bob, ever alert, spotted two teenagers driving away in a white Volkswagen from Windward Volkswagen. Bob, the sleuth, immediately tipped off Kailua police, personally followed the teenagers to the Enchanted Lake area, and was on hand to point them out when police arrived.

F. J. Pinkerton was honored on his 78th birthday at a surprise luncheon at the Reef Hotel by the Waikiki Kiwanis Club. Since his retirement in 1964, F.J. has continued as director of the Blood Bank of Hawaii, which he has headed since 1941. He was presented with a plaque from the Kiwanis and an engraved calabash from the Junior Chamber of Commerce. The speakers touting his accomplishments included **Walt Quisenberry** representing the Governor, and **George Mills** the Hawaii Medical Association.

The American Academy of Orthopedic Surgeons inducted **Albert Chuu-Hoon**, **Gabriel Ma**, **Donald Maru**—
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KWAN HEEN HO, M.D. 1906-1970

Born in Honolulu, June 29, 1906, son of Ho Poi and Chang Shee, Dr. Kwan Heen Ho died in Honolulu, February 5, 1970, in St. Francis Hospital, after a long fight against cancer.

Dr. Ho graduated from Punahou School in 1925, attended the University of Hawaii from 1925 to 1927, and received both his B.S. and M.D. degrees from St. Louis University, St. Louis, Missouri, in 1929 and 1931 respectively. He was elected a member of Alpha Omega Alpha honor medical fraternity while in St. Louis.

Rotating internship was at the St. Louis University Group Hospitals, 1931-1932 and general surgery residence was at St. Mary's Hospital, Jefferson City, Missouri, 1934-1935, and St. Louis University Group Hospitals, 1938-1940.

He married Ellen Achuck Wong, December 21, 1932.

A colonel in the U. S. Army during WWII in the China-Burma-India Theater, Dr. Ho was Chief of the Surgical Service of the 48th Evacuation Hospital and Commanding Officer of the 56th Station Hospital and 21st Field Hospital. At the time of death he was a Colonel USAF (ret.).

Upon his return from Far Eastern military service, he joined the Chang Clinic in the practice of medicine, specializing in surgery, gynecology and obstetrics. In 1957, the Chang Clinic was dissolved and he started his own office.

He was a member of the American Medical Association, Hawaii Medical Association, and the Honolulu County Medical Society, a Fellow of the

American College of Surgeons, and a diplomate of the American Board of Abdominal Surgery.

Dr. Ho was on the staff of St. Francis Hospital, Queen's Medical Center and Kauaikeolani Children's Hospital and Kapiolani Maternity and Gynecological Hospital.

He was also a member of the American Legion and served as commander of Kau Tom Post No. 11 in 1952, a director of Kalakaua Land Development and past president of the Pun Tao Society.

Past associations include membership in the Chee Kung Tong Society, the Ho Society, American Chinese Club, Chinese University Club, Jefferson Lodge No. 43, A. F. and A. M. of Jefferson City, Missouri, Golden West Commandery No. 43, Knights Templar, Los Angeles, and the Al Malai-kah Temple (Shriners) of Los Angeles. He served as Liquor Commissioner, City and County of Honolulu, from 1951 to 1953.

Survivors include his widow Ellen, daughters Mrs. Herbert W. F. (Ann Barbara) Yee, Mrs. Richard C. (Judith Ellen) Schulz, granddaughter Susan Marie Schulz, brothers Kam Hon, Kam Hee, Francis K. M., Kam Kong, and Bernard Y. T., and sisters Mrs. Kam Chin Chun Ming, Mrs. Kam Yee Ting, Mrs. Kam Moon Kam, Mrs. Samuel Yen (Helen) Eng, Mrs. Albert (Alice) Char, Mrs. Samuel (Margaret) Wong, Miss Elsie Ho, Mrs. Fannie Chock, Mrs. Nancy Dott, Mrs. Richard (Thelma) Mock, and Mrs. Norma Bertelmann.

Burial with military honors was at the National Memorial Cemetery of the Pacific, Punchbowl.

FRED K. LAM, SR., M.D.

COUNCIL MEETING

February 6, 1970—5:00 P.M.
Mabel Smyth Conference Room, 2d Floor

PRESENT

George H. Mills, presiding; Drs. Batten, Chinn, Dang, Iaconetti, Helms (for Jones), Lowrey, Miyashiro, Moore, and Sloan; plus Drs. Winfred Lee, Goebert, Oren, Omura, Wakai, Goto, Sia, Uehara, Mrs. Clifford Moran, Messrs. Richard Layton, H. Tom Thorson, and Melvin Leong.

MINUTES

The minutes were circulated, reviewed, and discussed. Under New Business "Review of Cancer Commission," Dr. Batten asked that sections (a) and (b) be modified in the minutes to read exactly like the report of the Cancer Commission.

ACTION:

It was voted to modify the minutes which pertain to the Cancer Commission to read exactly like it is in its report to the Council.

It was voted to approve the minutes of the December 7, 1969, meeting as modified.

COMMUNICATIONS NOT REQUIRING ACTION

Dr. Mills asked if there were any comments on the material circulated. Mr. Layton commented on the news article from the *New York Times* on "AMA Discloses Political Outlay," which did not clearly distinguish between the administrative and political dollars. They quoted Dr. Howard as saying that the AMA is spending \$700,000 a year to support the political action committee, that is for administrative purposes. Mr. Layton said this statement is not correct. The \$700,000 represents the budget of the Public Affairs Division which includes the Washington Office and the field service, and also AMPAC. Mr. Layton stated that there is no intermingling of dues as far as the political picture is concerned—it still all comes from voluntary contributions.

Dr. Iaconetti asked if the Council had taken a position on repealing the abortion law. It was stated that the Council had not officially taken a position and that the HMA's position to repeal the abortion law with proper medical safeguards was adopted by the Legislative Committee.

ACTION:

It was voted to adopt the policy of the Legislative Committee that the HMA's position be repeal of the abortion law with proper medical safeguards. There were two dissenting votes.

REPORT OF THE SECRETARY

The secretary recommended (1) that all roster changes reported by the counties for the months of November and December be accepted and approved, and (2) that 1970 dues waiver for Drs. Miyamoto and Francis Wong be accepted and approved.

ACTION:

It was voted to approve the recommendations.

As an addendum to the Secretary's report, Dr. Sloan reported that 20 physicians from HCMS have been dropped from active dues paid status.

Dr. Mills stated that some concerted effort should be initiated to get the house officers of the various hospitals and the medical students involved in the county society activities. It was pointed out that the Bylaws would have to be changed to include the medical students. Dr. Lowrey recommended that a letter be written to HCMS suggesting that these people be involved.

REPORT OF THE TREASURER

The treasurer recommended (1) that this report be accepted and placed on file subject to audit, (2) that the amounts charged against the President's Contingency Fund for mainland travel, be transferred to the mainland travel account, and (3) that the amounts authorized by the President for inter-island travel, be charged to that account rather than the President's Contingency Fund.

ACTION:

It was voted to accept the recommendations.

REPORTS OF STANDING AND SPECIAL COMMITTEES

Commission on Legislation: The Commission's report was circulated and reviewed. There were no recommendations.

Dr. Goto reported that the Medical Practice Act Committee surveyed the HMA membership to see whether or not it wanted to retain or eliminate the residency clause. Preliminary results showed that out of 783, to date 580 were returned (60%) with 246 voting to eliminate and 331 (57%) voting to retain the residency clause.

Dr. Mills reported that there is a lot of discussion in the community at the present time about changing some of the residency requirements. He stated that CHP's Ad Hoc Committee on Manpower came up with five recommendations. The HMA will be asked to review them. Dr. Mills stated that when this is received and when the questionnaire survey is completed, the Council will wait for direction from the Medical Practice Act Committee.

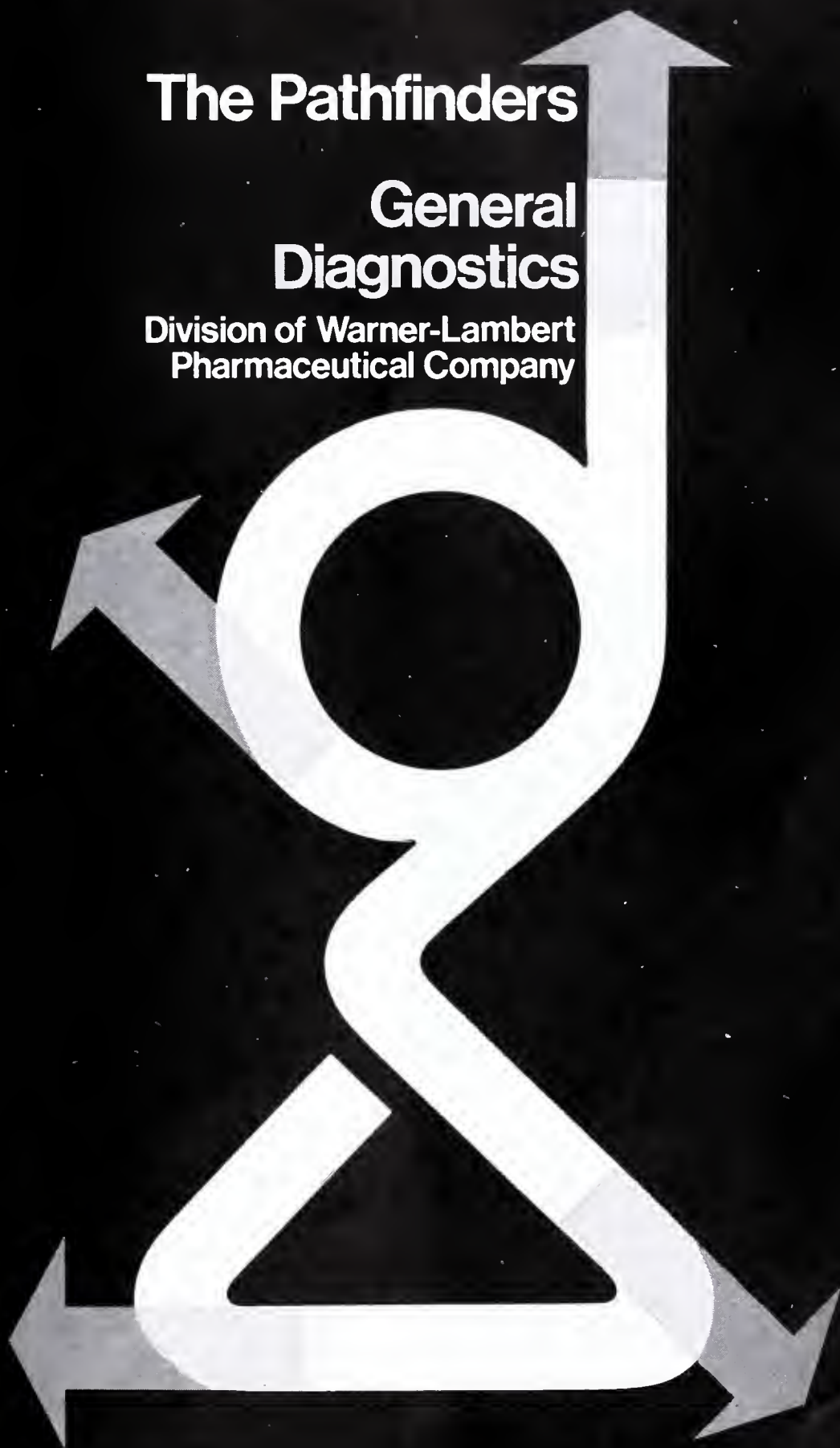
Mr. Layton was asked to comment in the area of national legislation. He stated that the biggest problem the AMA is faced with at the present is the health costs amendment which has been proposed by HEW. This has to do with government health programs and covers both Title XVIII and Title XIX. He said that AMA objected to the original draft submitted to the House Ways and Means Committee (this was not submitted in bill form). After the first presentation, AMA was able to secure many modifications, but the AMA still feels it carries a great many implications which are extremely dangerous; e.g. it will give to the Department of HEW, at the discretion of the Secretary, the right to expel any physician from either program if there is any demonstration of fraud. AMA's feeling is that this is a matter for county society peer review committees. If they are going to bypass peer review committees, they are in truth indicating that they do not think county societies are doing the job AMA thinks they are doing. AMA's legal counsel and the Secretary for the Council on Legislative Activities feel that health cost effectiveness, if applied and implemented literally by the Secretary of HEW, would give

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The Pathfinders

**General
Diagnostics**

**Division of Warner-Lambert
Pharmaceutical Company**



HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: LOUISE WULFF, MT(ASCP), University of Hawaii

Edith Eckstein, National Nominee

Edith Eckstein, long active in HSMT, has been nominated by the ASMT Nominations Committee for one of the two Board of Registry seats. At a time so crucial to the whole future of medical technology, Edith's level head and mature point of view will be most useful. Even before holding the position of supervisory medical technologist of the Tripler Blood Bank and assistant administrator and teaching supervisor for the Tripler School of Medical Technology, she had close contact with interning students for the last fourteen years.



A past president of HSMT (1965-66), Edith also served with distinction on many committees, at various times chairing Membership, Publications, Constitution and Bylaws, and Planning and Scope.

With the Board of Registry and the Board of Schools the center of so much controversy, it takes the sort of courage we all know Edith possesses to even think about serving on the Board.

To help insure her election, members are urged to write their mainland Med Tech friends asking for their support for Hawaii and Edith Eckstein's candidacy. Imua!

Twenty-first Annual Convention Scheduled for May

Mrs. Jean Otake, MT (ASCP), a Medical Group technologist and chairman of the HSMT 1970 convention, announces a program that promises to be the best ever in twenty-one years of meetings. Scheduled for May 14, 15, and 16, the meetings, scientific sessions, and exhibits will be held in the Princess Kaiulani Hotel with the Saturday night banquet at the Hilton Hawaiian Village Hotel.

The sessions held on Thursday should be of interest not only to medical technologists, but to other laboratory personnel as well, since they cover the use of computers and the role of management in the laboratory. The use of statistical data, especially as they aid in the calculation of normal values and selection of new procedures, will be discussed on Thursday morning by Dr. James Navin, Chief of Clinical Pathology at Tripler U.S. Army Hospital. Dr. John Hardmen, also from Tripler and Chief of Pathology Services and Director of the School of Medical Technology, will answer the question "What Can a Computer Do for You that You Can't Do Now?"

After exhibit review and lunch, Hyland Laboratories will conduct its management workshop which will cover three basic areas (1) The Challenge of Medical Technology, (2) Management by Care, (3) Effective Listening. To lighten the load of this serious session, Hyland invites everyone to cocktails before dinner.

Following dinner at the Princess Kaiulani Hotel, a grave and growing problem for all laboratories will be aired by Mr. Thomas Waddoups, who will talk on the "Medicolegal Responsibility of the Laboratory." Mr. Waddoups, who grew up in the Islands, was graduated from McKinley High School and the University of Hawaii before leaving for Georgetown University Law School, and is an expert in the field of medical jurisprudence.

Friday's schedule is very busy, with workshops and seminars running concurrently. The first, covering various areas of current interest such as biochemical and cytological studies in amniotic fluid analysis, will also include a discussion of steroid analysis led by Dr. Winfred Y. Lee, one of Honolulu's foremost endocrinologists.

Across the hall, the bacteriologists will be learning about that elusive nonfermentative gram-

negative bacteria, pseudomonas, in a workshop on "Pseudomonas and All That" conducted by Dr. Drake Will, Director of Laboratories, Queen's Medical Center. In the afternoon Dr. Norman Goldstein, a dermatologist with the Honolulu Medical Group, will present a session on "Medical Mycology."

The annual meeting in the evening closes Friday's sessions with a get-together for election of officers and other business, but also for an entertaining, funtime as well.

Saturday's all-day scientific session features Dr. Thorne Butler from Southern Nevada Memorial Hospital, bringing with him his very fine workshop, "Emergency Room Toxicology." This is really a homecoming trip for Dr. Butler, who was born in Honolulu and attended Punahou School. He is bringing his family with him, he says, for a refresher course in Japanese food, to which they became devoted during a two-year stay in Japan.

Saturday evening we will leave our scientific minds at the Princess Kaiulani and move the convention to the Hilton Hawaiian Village for the annual banquet—always fun, always exciting. The seven-course Chinese dinner will be preceded by a no-host cocktail hour.

For the autoanalyzer buffs, a special pre-convention series of workshops will be brought to the society by Technicon. Firm times and dates will be published later, but start planning now for the middle of May!

Hawaii Salaries Reach Recommended Levels

The following report from the Personnel Relations and Services Subcommittee of ASMT will make Island Medical Technologists happier—we hope! After many years of lower-than-national-average salary means, in spite of a much higher cost of living, this report shows that Hawaii's MT salaries are now in line with recommended national figures. Of course, the cost of living is still the highest in the nation, but there's not much we can do about that—paradise has always come high. This portion of the 1969 National Personnel Relations Committee Annual Report was sent to us by Mrs. L'Nora C. Wells, Chairman.

JOB CLASSIFICATION AND SPECIFICATION	BEGINNING RANGE (AS MONTHLY SALARY)
Administrative Technologist	\$900-1300
Coordinator of Educational Services	\$850-1200
Supervising Technologist	\$750-1000
Senior Technologist	\$700- 900
Technologist II	\$650- 800
Technologist I	\$600- 750
Laboratory Technician	\$500- 650
Laboratory Assistant	\$450- 550
Cytotechnologist	\$550- 750
Histologic Technician	\$500- 750

The Committee further recommends that salary scales, when established, provide for a step merit increase system which would provide for a minimum of 5% increments between increases.

Administrative Technologist: Responsible for the over-all administration and supervision of laboratory and laboratory personnel. Requires a minimum of a Baccalaureate degree, five years' experience as a general technologist, and previous experience in a supervisory position.

Coordinator of Educational Services: Responsible for the development and coordination of laboratory training programs and for supervision of the students enrolled in these courses. Requires a minimum of a Baccalaureate degree, at least three years' experience as a general technologist, the ability to teach, and required professional training.

Supervising Technologist: Responsible for the immediate supervision of one or more departments in the laboratory. Requires a minimum of a Baccalaureate degree, three to five years' experience as a general technologist, a demonstrable ability to supervise and instruct laboratory personnel, and required professional training.

Senior Technologist: Capable of performing all of the tests in a single department or most of the tests in all areas of the clinical laboratory, with a minimum of supervision. Requires a Baccalaureate degree, two to four years' experience as a general technologist, and required professional training.

Technologist II: Performs and demonstrates better than average proficiency in one or more areas of the clinical laboratory under direct supervision. Requires a Baccalaureate degree, one to two years' experience, and required professional training.

Technologist I: Performs and demonstrates proficiency and understanding of the procedures in one or more areas of the laboratory under immediate supervision. Requires Baccalaureate degree, a year's experience, and required professional training.

Laboratory Technician: Exercises efficient performance of technical procedures as designated in specific position descriptions and in areas included in specific training program under immediate supervision. Requirements based on MLT certification, CLA certification with AA degree, or equivalent educational and training background.

Laboratory Assistant: Exercises efficient performance of mechanical and routine procedures that require minimum judgment and correlation factors and as specifically outlined in training program. Works only under immediate supervision. Requires CLA certification or equivalent.

Cytotechnologist: Responsible for preparation and screening of material for cytological study. Requires two years of college and required professional certification or training.

Histologic Technician: Responsible for preparation of tissue specimens for anatomical examination by pathologist. Requires a high school diploma and required professional training. ■

Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 287.

(1) FALSE

A clinical syndrome of acute psychosis associated with Cannabis derivatives and environmental stress has been observed in 12 soldiers seen in Vietnam. Each case was characteristic of acute toxic psychosis with organic features and ten cases had paranoid features as well. Factors unique to Vietnam and combat situations seem pertinent; treatment was conservative and supportive. (*JAMA* Oct. 13, 1969, p. 299, col. 1, para.1)

(2) FALSE

Knowledge concerning the effects of Cannabis derivatives is controversial if not confusing. Cannabis derivatives have been used for medicinal purposes since the third century BC. Shen Nung, the Emperor of China, 2737 BC, extolled Cannabis derivatives as healthful and as psychic liberators. During the 19th century more than 100 medical reports were published in the United States recommending the use of Cannabis derivatives. (*JAMA* Oct. 13, 1969, p. 299, col. 1, para. 3)

(3) TRUE

In contrast to other varieties of *C. botulinum*, type E spores germinate and produce toxin at refrigerator temperatures. Thus, in fresh or processed fish, lethal accumulations of botulinus toxin may develop when a lightly contaminated fish is held at low temperatures under anaerobic or nearly anaerobic conditions.

Thus far the majority of reported type E, botulism cases have resulted from the consumption of home-preserved fish or fish products. Because of the wide distribution of the organism, the potential problem of future large outbreaks from commercially processed fish products exists unless improved processing procedures are followed. (*JAMA* Oct. 13, 1969, p. 304-305, col. 2, para. 6)

(4) (c)

The four kindreds described in this study appear to represent a familial syndrome of soft-tissue sarcomas in children and breast cancer and other neoplasms in young adults. Each family had a pair of young children (three sets of sibs, one set of cousins) with soft-tissue sarcomas. The 3 sib pairs, ascertained from a survey of 649 children with rhabdomyosarcoma, surpass the occurrence of 0.06 pairs expected on a chance basis. In addition, a parent of each affected child had cancer—involving the breast in three mothers under 30 years of age and consisting of acute myelocytic leukemia and disseminated skin cancer, respectively, in two fathers. Relatives of the affected parents also had a high frequency of malignant neoplasms at a young age, particularly breast cancer and soft-tissue sarcomas. (*Ann Intern Med* Oct., 1969, p. 750, col. 2, para. 3)

(5) (e)

Fluorescent microscopy has become widely used as a research and clinical method. During the past several years numerous reports have appeared defining the nature of the immunofluorescent patterns seen in lupus erythematosus and in the chronic bullous dermatoses. When studying sections of the skin from LE patients by the direct immunofluorescent technique one frequently sees either a fluorescent band at the dermal-epidermal junction or clumps of fluorescent immunoglobulins in the subjacent area. In systemic LE (SLE) this may be seen in clinically uninvolved skin as well as in involved areas, whereas in discoid LE (DLE) only the lesions are positive. (*Ann Intern Med* Oct., 1969, p. 753, col. 1, para. 2)

(6) FALSE

In the past, elevations of serum alkaline phosphatase in patients with cancer have usually been interpreted as being due to metastases in either liver or bone or to a primary bone tumor such as osteogenic sarcoma. However, Gault, describing cases with lung cancer, and Nichols, reporting on adrenal carcinoma, commented upon patients with elevated levels of serum alkaline phosphatase in whom no definite bone or liver metastases could be found. In one of these cases a marked decrease in serum alkaline phosphatase followed removal of the primary tumor.

Large amounts of alkaline phosphatase have been demonstrated histochemically in certain tumor tissues and in some aspirated tumor cells. (*New Eng J Med* Oct. 2, 1969, p. 760, col. 2, para. 3) ■

County Society News *continued from 311*

pital. An executive committee meeting with community leaders will be scheduled to discuss the matter of physician shortage prior to which there will be a membership poll to establish an official stand. The present and immediate past presidents of the Maui County Medical Society were present to discuss the status of State County hospitals. It was voted to support Maui County Medical Society's effort, which in no way indicates that the Hawaii County Medical Society is contemplating similar action.

Honolulu

Approximately 123 members attended the January 6 meeting. Two new members were introduced: Robert Lee Altman and Raymond W. Brust, Jr. The forthcoming symposium on rubella was announced, as was the breakfast meeting sponsored by the Arthritis Foundation. Members were reminded to attend the HMA's Drug Abuse Seminar and the Stroke Seminar of the Pacific Institute of Rehabilitation Medicine. Lt. Governor Thomas P. Gill and Senator Hebden Porteus were the guest speakers.

Approximately 120 members attended the February 3 meeting. Four new members were introduced: Jack Scaff, Ronald Yamaoka, Daniel Bessen, and Joseph Battista. Members were asked to cooperate with the Department of Health's mass immunization program. Mrs. Jerome Tucker invited attendance at the next AMA-ERF affair. Mr. Thorson reported on the malpractice insurance problem. Dr. Edward Wo Lum introduced the guest speaker, Mr. Hal Wood, sports editor of the *Honolulu Advertiser*, who spoke on his experiences in covering sports events and the importance of having a new stadium in Honolulu.

Kauai

Five guests were present at the February 2 meeting. HMA president and president-elect, Drs. Mills and Lowrey, spoke on various HMA activities. Maui County Medical Society president and immediate past president, Drs. Uehara and Morris, and a representative from the Department of Health, Dr. Berry, discussed Act 97 hospitals. The Society voted to endorse the resolution of the Maui County Medical Society relating to Act 97 hospitals.

Maui

The January 22 meeting was held at the Club Rodeo. Bylaw changes accepted reduced the number required for a quorum from one-half to one-third of the mem-

continued page 320

A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."^{*} However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A[®] base.[†]

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is



practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to

continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.

^{*}McClarín, W. M., and Knox, J. M.: *Cutis* 3:619 (June) 1967.

[†]The MICEL A[®] base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

Tinver[®] Lotion

Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.



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bership, and clarified the method of selecting HMA Councillors.

Two new members were accepted into the Society. Donald Dietrich and Friedrich F. Maag. Dr. Wong advised that 1,252 participated in the diabetes screening program. It was voted to pay the round trip air fare for eight Maui County students to attend the HMA Careers Day program. It was suggested that HMA send out meeting and activity notices two weeks in advance. The third Tuesday of the month was chosen for future meeting dates. There was a short discussion on the PR Committee's functions. It was voted to continue performing the physical examinations for Boy Builders Unlimited. Drs. Howell and Sowers volunteered to serve on the Committee for Research Studies of the Maui Community College. A budget item of \$1,200 was approved to send members to attend various functions. It was voted to assess the members \$30.00 each to cover this expense. Another assessment of \$40.00 was voted to cover cost of dinner meetings. Dr. Morris was appointed to chair a committee to check on standardization of physical examination forms. Dr. Howell was appointed to make a study of group and solo practice. ■

Hawaii Medical Ass'n continued from 314

him almost absolute control over not only cost of care but quality of care.

Mr. Layton reported that chiropractic is all over the place. There are about 60 bills already introduced by individual members of the Congress. The chiropractors have been extremely active and have been doing a "bang-up" job with the congressmen. They are getting bill after bill put in. One of Hawaii's congressmen has submitted a bill. Bills are almost identical, that is they ask for inclusion of chiropractic services under Medicare within the limits of their licensure.

Mr. Layton reported that another area of interest is the Senate Finance Committee's "exposé" of doctors who are grossing or did gross \$25,000 or more from Medicare or Medicaid. They claim there are many doctors who are charging for services they are not administering, interns and residents are asked to render services while payment goes to the staff doctors, etc. Mr. Layton said that the AMA is preparing answers for most of the allegations.

Mr. Layton reported on the AMA's position on Medicaid. AMA is supporting a national health program with a tax credit for people who purchase approved health insurance.

Commission on Internal Affairs: The Commission had one recommendation: That waiver of registration fees for the annual meeting be approved for the following: (1) guest speakers from the mainland, (2) all interns

and residents, (3) all nonmember military personnel, (4) nurses, and (5) professional people (other than MD's) in academic work.

Dr. Dang pointed out that the Honolulu County Medical Society has been trying to encourage military physicians to join HCMS. Their dues are reduced. He felt that if the military physicians' registration fees are waived, it will not benefit them to join. It was felt that the interns and residents at Tripler would be covered under the waiver of registration fees for interns and residents and that other military physicians would have to pay the \$50 registration fee or join the medical society in order that their registration fees can be waived.

ACTION:

It was voted to amend the recommendation by deleting all "nonmember military personnel."

It was voted to approve the Commission's recommendation with the deletion of nonmilitary personnel.

Mr. Layton reported that the AMA will probably not consider HMA's invitation to the AMA to hold its 1975 Clinical Meeting in Honolulu until after the AMA's annual meeting in June.

Commission on Education and Scientific Research: The Commission had three recommendations: (1) That a workshop on PAS would appear to be advisable and if it cannot be included in the 1970 HMA Annual Meeting, that consideration be given to a workshop at some other time. (2) That definitive planning for continuing medical education be presented by the time the House of Delegates meets in May. (3) That the Council establish a policy relative to acceptance of advertising from out-of-state laboratory services.

There was discussion on the PAS workshop. Dr. Oren pointed out that Dr. Payne and his staff will be in Hawaii next month and these people are very much interested in this area. He suggested that perhaps someone on his staff could speak to the Council about this and then the Council can decide whether or not such a workshop would be feasible.

ACTION:

It was voted to defer recommendation No. 1 until the Council has had an opportunity to discuss it with Dr. Payne and his staff.

It was voted to approve recommendation No. 2.

The Council discussed setting a policy relative to acceptance of advertising from out-of-state laboratory services. It was noted that a resolution re commercial advertising of a medical specialty by lay corporations in AMA publications was adopted. The resolves in the resolution read as follows:

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Order of the Golden Rule, Hawaii Funeral Directors Association

Resolved. By the Hawaii Medical Association, at its 113th Annual Meeting, that this Association
(1) reaffirms medicine's traditional opposition to the practice of medicine by lay corporations, and to solicitation and to commercial advertising of the practice of medicine; and
(2) requests its delegate to oppose this new AMA Trustee policy vigorously at the AMA convention in New York next July; and
(3) requests this delegate to call on the AMA to reverse this Trustee policy at the July AMA convention in New York City.

It was noted that the AMA did reverse the Trustee policy at its meeting. Mr. Layton suggested that a letter be written by the HMA's legal counsel to Mr. Hirsh of the AMA posing the specific question with a copy of the letter might be able to give HMA something to go on.

ACTION:

It was voted not to establish a policy and that the letter be referred to the AMA Council.

Commission on Medical Services: The Commission had five recommendations: (1) That the Council approve the request of Drs. Siemsen and Wong and support legislation which would provide for State payment for professional services provided in the renal dialysis and transplant programs, using a package method based on the professional fees prevalent in the community. (2) That the Council approve the proposal that Secretary Finch and Hawaii's members in Congress be sent a copy of Dr. Mills's message to the members on the status of DSS negotiations (which will appear in the January-February issue of the JOURNAL), and that a press conference be called to make the public aware of the situation. (3) That the Council approve the letter proposed for transmittal to Mr. Hasegawa, Director of the Department of Labor. (4) That the Council develop a policy outlining the circumstances under which the HMA should ask the HMSA for statistical information and for performing administrative and fiscal functions not now in its jurisdiction; i.e., Workmen's Compensation and DSS. (5) That the Council approve the guidelines developed by the Medical Care Plans Committee as contained in this report and advise how these functions are to be implemented.

ACTION:

It was voted to accept recommendation No. 1 that HMA support legislation requesting State funds for the renal dialysis and kidney transplantation services, and that the Legislative Committee be apprised of this matter.

It was voted to accept recommendation No. 2.

It was voted to amend recommendation No. 3 to read "that the proposed letter, with the necessary changes, be sent to HMSA rather than the Department of Labor." There were two dissenting votes.

It was felt that recommendation No. 4 should be modified to read "that the Council develop a policy outlining

the circumstances under which the HMA should ask insurance companies, government agencies, etc., for statistical information and for performing administrative and fiscal functions not now in its jurisdiction.

ACTION:

It was voted that recommendation No. 4 be referred to the Medical Care Plans Committee to develop policy which would be subject to Council approval.

The following guidelines were developed by the Medical Care Plans Committee on the functions of a Peer Review Committee:

1. The Peer Review Committees should be available to everyone.
2. Members of the Peer Review Committee will be appointed by the county medical societies. The Peer Review will be responsible to the county that appoints it.
3. The members of the Peer Review Committee should be compensated.
4. If grievances or disputes cannot be settled on the county level, the case will go before the HMA State Committee on Peer Review which is composed of the Chairman of the Medical Care Plans Committee, the Commissioner on Medical Services, and one member from each of the County Peer Review committees.
5. Staggered committee appointments are recommended.
6. The composition of the committee, i.e., specialty representation, is left to the county society.
7. A "frame of reference" should be established to guide the Peer Review Committee.

It was pointed out that the HMA does not have a Peer Review Committee and that if this is being recommended, it would have to be referred to the Bylaws Committee to have its functions delineated.

ACTION:

It was voted that recommendation No. 5 be referred to the Bylaws Committee and that they be directed to set up a committee as recommended, and that changes be made as outlined in guideline #4.

Commission on Public Health: The Commission recommended the following: (1) That the HMA Council take a stand on pushing for national legislation to require chest x-rays on the extension of visas. (2) That the HMA President write a letter to Hawaii congressmen supporting such legislation. (3) That consideration be given to "New Challenges to Chronic Disease" as a theme for the 1971 annual meeting. (4) That Council consider allocating \$313.40 for printing the school health Sex Education Booklet. (5) That some direction be given re

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secretarial work for the Maternal and Perinatal Mortality Study Committee.

The Commission also advised that subsequent to preparing his report, the Heart Committee voted not to support the RMP proposal for a mobile coronary care unit.

ACTION:

It was voted to approve recommendation No. 1.

It was voted that the HMA President write a letter to Hawaii's Congressmen supporting legislation which would require chest x-rays on the extension of visas.

It was voted to refer recommendation No. 3 to the Scientific Program Committee.

It was voted that recommendation No. 4 be approved if Mead Johnson funds or funds from other sources are not available.

It was voted that Dr. Mills speak to Dr. Quisenberry about the Maternal & Perinatal Mortality Committee secretarial work.

Commission on Interprofessional and Public Relations: The Commission recommended the following: (1) That the News Media Committee be allowed to establish an education division for news media awards this year since all awards are for medical journalism. (2) That an HMA member be sent to Chicago, March 19-21, 1970, for AMA's Fourth National Congress on the Socio-Economics of Health Care and New Concepts of Physicians' Assistants. (3) That the President of the HMA write a letter to Dr. Stephenson commending and thanking him on a job well done for the Drug Abuse Seminar.

ACTION:

It was voted to accept and approve recommendation No. 1.

It was voted to approve recommendation No. 2.

It was voted to approve recommendation No. 3.

Report of the Bureau of Planning & Research: The Bureau had the following recommendation: (1) That the Hawaii Medical Association take an active role in trying to bring about coordination in Hawaii of the several organizations involved in community health facility planning, including the Comprehensive Health Planning Committee and the Health and Community Services Council, so that we will have a uniform group working towards optimal planning and responsive to the needs of the community.

ACTION:

It was voted to accept the Bureau's recommendation, however, the Bureau be directed to come back to the Council with more definite recommendations on how to implement its recommendation.

Finance Committee Report: The Committee had two recommendations: (1) That the PBF Committee requested by the House of Delegates be appointed. It was noted that Dr. Robert Wong was asked to chair this committee. No action was necessary re this recommendation. (2) That the HMA and HCMS determine if it would be mutually beneficial to combine the two pension plans, and that if this is not possible, the HMA's plan be revised to make the two comparable in scope and benefits.

ACTION:

It was voted to approve recommendation No. 2.

Report of the Nominating Committee: The Committee met at 4:00 P.M., February 6, 1970, and submitted the following slate to the Council:

PRESIDENT-ELECT.....Herbert Y. H. Chinn, M.D.
SECRETARY.....R. Varian Sloan, M.D.
COUNCILLOR FROM HAWAII.....Ed B. Helms, M.D.
COUNCILLOR FROM MAUI.....Wm. E. Iaconetti, M.D.

Committees not yet assigned to Commissions: The following committees have not been assigned to commissions: (1) Environmental Health and (2) New Emerging Health Specialties. It was suggested that Environmental Health be added to the Commission on Public Health and that the New Emerging Health Specialties be added to the Commission on Interprofessional and Public Relations.

UNFINISHED BUSINESS

Peat, Marwick & Mitchell Report: Drs. Caver, DeJesus, and C. Jasinski were appointed to a Personnel Team to review the job descriptions and personnel policies developed by Peat, Marwick & Mitchell. Dr. Caver presented the report of the Personnel Team and went over its recommendations with the members of the Council. It was pointed out that the report had upset the staff, especially since their comments had been solicited but not acted upon.

ACTION:

It was voted to accept the Personnel Team's recommendations and to give this Team a vote of thanks.

Letter from OCHAMPUS: A letter of January 7, 1970, was received from OCHAMPUS re payment of \$762. At the last Council meeting it was voted that if further requests were received, they be referred to legal counsel for reply. No action was necessary.

Cancer Commission: The Council modified the report on the Cancer Commission which was submitted at the December meeting. The Cancer Commission is requesting adoption of the revisions proposed.

1. Cancer Commission membership make-up remain the same.
2. Each member to serve for three years (two HMA, two Cancer, two DoH, staggered terms.)
3. The chairman of the Commission will be selected by the HMA President from the six members of the Commission.
4. Requests for monies for any programs undertaken by the Commission be presented in detail: (a) these requests are to be reviewed and approved by the Cancer Committee and the Council. This requirement may be waived at the discretion of the President. (b) Detailed periodic reports of money disbursed from these grants are to be presented to the Cancer Committee of the HMA, the HMA Council, and House of Delegates. These reports should be made at reasonable intervals and not greater than every six months.
5. The Commission shall meet at least six times a year at reasonable intervals. Minutes of these meetings shall be distributed within two weeks of each meeting.

ACTION:

It was voted to adopt the revisions.

Report of Site Visit: It was reported that the Hawaii Tumor Registry site visit took place on January 26, 1970. It was further reported that the site visit was encouraging because for the first time there was someone on the site visit team who knew something about registries. It is anticipated that an answer to whether or not the grant has been approved will come the third week of April.

NEW BUSINESS

Report of AMA Field Representative: Mr. Layton reviewed the following: 1. The HMA organization structure of commissions and committees in relationship to other Associations. 2. The AMA is developing a Department of Congressional Relations. Mr. Layton asked that when letters are sent to the delegation, it would be extremely helpful if the lobbyists receive copies. 3. The USPHS has committed the sum of \$4.5 million to the Group Practice Association of America for the purpose of "developing group practice plans in 24 cities." This is not a study. Field representatives are being employed for each one of these cities to direct the activity involved. Mr. Layton reported that the AMA is not in agreement

with this activity but it does not know how to get around it. The AMA will keep the HMA apprised of further developments in this area. 4. The effect the IRS ruling on unrelated tax income will have on the AMA. 5. The AMA is phasing out its Institute on Biomedical Research. He pointed out that this would mean a savings of \$1.4 million. 6. The AMA has created a committee on Planning and Developing which will consist of nine members. One of the members will be from SAMA. Mr. Layton stated that AMA, too, is including members of SAMA in its activities. 7. Mr. Layton told of the meeting Dr. Howard and Dr. Wilbur had with Mr. Walter Reuther. 8. Mr. Layton reviewed AMPAC-HAMPAC activities. He noted that awards are given every year for membership activities. In total contributions this year, Hawaii ranked two steps higher than it did last year, which is a little over the average.

Election of members to HAMPAC Board: It was reported that the election of HAMPAC Board members is one year overdue. The following are the present Board members:

Woman's Auxiliary	Mrs. Eldon Dykes
1st District.....	Mrs. Jerome Tucker
2d District.....	Robert M. Miyamoto
3rd District.....	Wm. E. Iaconetti
4th District.....	Don E. Poulson
5th District.....	Rodman Miller
6th District.....	Herbert Y. H. Chinn
7th District.....	L. Q. Pang
8th District.....	P. Howard Liljestrand
	B. A. Richardson
	George Goto
	Y. Miyashiro

Mrs. Moran stated she will check with the women to see if they will continue to serve on the Board. Dr. Chinn nominated Dr. E. Robert Ballard to succeed him in the 5th District. Dr. Helms will speak to Dr. Bracher about a representative from the 1st District to replace Dr. Miyamoto.

In the HAMPAC Bylaws it states that no member shall

serve for more than six consecutive years. There are three Board members who fall into this category. However, Mr. Layton pointed out that if the Bylaws and Constitution were amended to read that Board members be appointed annually but not to run more than ten consecutive years, this would be one way of getting around it.

ACTION:

It was voted that HAMPAC amend its Constitution and Bylaws to read that Board members be appointed annually but that terms not run for more than ten consecutive years.

It was noted that any changes in the Bylaws and Constitution must be brought before the HAMPAC membership.

Relationship of RMP and CHIP: Dr. Mills briefly reported on the relationship between RMP and CHIP. He said that there seems to be some concern nationally about the interrelationship of these two bodies.

Proposal for changing site of 1973 Annual Meeting: It was pointed out that the House of Delegates voted on meeting dates and sites for the next five years. Dr. Mills stated that he did not see any reason why the meeting site for 1972 could not be changed to Maui if the physicians on Maui are ready to have one there and if there are sufficient facilities. Dr. Iaconetti stated that Maui is ready.

Miscellaneous: A special award for a retired physician.

ACTION:

It was voted that recognition be given to a retired physician at the HMA's Annual Meeting, and that the Awards Committee be instructed to prepare such an award.

Shortage of Physicians on the Island of Hawaii: A letter was received from the Secretary of Hawaii County Medical Society which reads:

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The Hawaii County Medical Society has initiated a program with various community groups to help alleviate the physician shortage on this island, especially in the city of Hilo. Recently some of our physicians have either retired or partially retired from practice and the recent death of one physician has depleted our ranks to what we consider near the critical level. Does the Hawaii Medical Association have any thoughts as to how more physicians can be encouraged to establish their practice here? Any assistance you can give will be greatly appreciated.

Mr. Layton was asked to check with physicians on the mainland who might be interested in practicing in Hawaii. Dr. Helms reported that he has been trying to recruit doctors for their group but first he would have to convince members of the group to offer attractive salaries. It was suggested that Dr. Helms check with groups on the mainland to see what they pay physicians and then make comparable offers in order to attract these physicians.

Malpractice Insurance: Dr. Sloan asked if some type of legislation could be introduced re group malpractice insurance. It was reported that this matter has been discussed with Mr. Ed Honda, Director of the Department of Regulatory Agencies. Dr. Goto said he would pursue this matter further and report back to the Council at its next meeting.

Next Council Meeting: Since Friday seemed to be agreeable to everyone, the next meeting is scheduled for April 3, 1970, 5:00 P.M.

ADJOURNMENT

The meeting adjourned at 10:00 P.M.

R. VARIAN SLOAN, M.D.
Secretary

Book Reviews continued from 310

the other hand, it will certainly find its way to the shelves of those surgeons, gynecologic or otherwise, interested in radical pelvic surgery. For those with only a cursory interest in the subject, this book will be of value as a concise review of therapy of female genital tract malignancy.

MILLARD S. L. SETO, M.D.

Autogenic Therapy: Vol. I, Autogenic Methods

By Johannes H. Schultz, M.D., and Wolfgang Luthe, M.D., 255 pp., \$13.75, Grune & Stratton, 1969.

Autogenic Therapy: Vol. II, Medical Applications

By Wolfgang Luthe, M.D., and Johannes H. Schultz, M.D., 219 pp., \$11.75, Grune & Stratton, 1969.

Autogenic Therapy: Vol. III, Applications in Psychotherapy

By Wolfgang Luthe, M.D., and Johannes H. Schultz, M.D., 228 pp., \$11.75, Grune & Stratton, 1969.

THESE VOLUMES describe a therapeutic method little known in this community. Autogenic therapy seeks to achieve both psychological and physiological changes simultaneously by having the patient concentrate and meditate in a series of self-regulatory maneuvers. As such, the method appears to have much more in common with the "behavioral therapies" rather than with the more dynamic methods of psychiatry. The aim of the method is largely directed at ameliorating psychosomatic conditions.

K. Y. LUM, M.D.

Pediatric Surgery, 3rd Ed., Vol. I and Vol. II

Edited by Orvar Swenson, M.D., and contributors, 1,472 pp., \$45.00, Appleton-Century-Crofts, 1969.

JUST AS BUSINESSES and surgical departments have evolved from the stage of proprietorships and single department heads to large corporate structures and departments governed by surgical committees, respectively, so the authorship of *Pediatric Surgery* has evolved from the experience of one man to the joint compendium of 24 authors in addition to its editor. With this expansion of authorship came the parallel growth from a one to two volumes.

The text remains one of excellent general information on pediatric surgical problems, of particular use to general practitioners, pediatricians, and surgeons. The chapters most worthy of note are of course those written by Dr. Swenson, as they represent the culmination of his keen ability to observe and perform surgery. The chapter on Hirschsprung's disease is particularly good as it represents over 20 years of experience with this disease, for which Dr. Swenson devised the abdominal-perineal resection and pull-through anastomosis now bearing his name.

Other topics which are well covered are appendicitis; plastic repair of the nose, lips, palate, and ear; and urinary diversion. Anesthesiology and inhalation therapy are of particular importance in infants, and the discussion of these subjects is well done. A useful chapter is the one on teratology, which should round out the surgeon's knowledge of conditions he is frequently called on to treat. Chapters that are particularly valuable because they represent the accumulation of many years experience by the authors are those on esophageal atresia and tracheoesophageal fistula, imperforate anus, and those on the larynx and tracheobronchial tree. As with most textbooks, this one also suffers from some significant omissions. Examples of common conditions that are not mentioned are syndactyly and polydactyly, and the indications for polyethylene tube insertion in ear infections.

In general the book represents a compilation of information which is presented in narrative style rather than large series of cases in tabular form.

WALTON K. T. SHIM, M.D.

The Artificial Kidney: Manual on Artificial Organs, Vol. I

By Yukihiko Nose, M.D., Ph.D., 343 pp., \$27.75, The C. V. Mosby Company, 1969.

THE FORMAT OF THIS BOOK has been designed to make the subject matter easy to understand. Dr. Nose, head of the Artificial Organs Department, Cleveland Clinic, and Dr. Satoru Nakamoto, head of the Artificial Kidney Department, Cleveland Clinic, present an excellent, comprehensive, graphic manual on the artificial kidney. The book is replete with illustrations to make comprehension of the technical details relatively easy. The subject matter progresses logically from a history and description of principles of dialysis to the indications for and complications of dialysis, patient selection for long-term dialysis, and home usage of the artificial kidney. The various dialyzer designs and functions are compared and the surgical technique and care of arteriovenous cannulas and fistulas are well presented and illustrated. The section on dialysate delivery systems and monitoring devices is necessarily technical. The chapter on future developments of the artificial kidney discusses the need to lower the high cost of regular treatment by hemodialysis by developing low-cost disposable dialyzers and simple delivery systems. Work being performed on a disposable envelope insert developed by Dr. Nose for Kiil boards, the capillary kidney by Stewart, and the accordion-type packaging of dialyzing membranes resulting in a very small efficient dialyzer, by Bluemle, are steps in this direction. The appendixes of this volume are quite informative especially in regard to manufacturer and distributors of dialysis supplies and equipment.

DUDLEY S. J. SETO, M.D.

Techniques of Thin-layer Chromatography in Amino Acid and Peptide Chemistry (English revised), 2d Ed.

By Gyorgy Pataki, 252 pp., \$18.75, Ann-Arbor-Humphrey Science Publishers, Inc., 1969.

THE GROWTH of technical refinements in a field as highly specialized as thin-layer chromatography makes this excellent revised book necessary. A laboratorian's handbook, it contains nearly a thousand references from international chromatographic literature less than ten years old. While few physicians will find a place for it on their personal bookshelves, it encompasses a variety of methods which are already a part of medicine's present concern: e.g., amino acid metabolic deficiencies, and some clear views of the future, notably amino-acid and peptide "fingerprinting."

Drake W. Will, M.D.

Abdominal Operations, 5th Ed., Vol. I and Vol. II

By Rodney Maingot, F.R.C.S., 1,827 pp., \$45.50, Appleton-Century-Crofts, 1969.

THE FIFTH EDITION of Maingot's *Abdominal Operations* has been enlarged by the addition of 25 chapters and has been converted from one to two volumes. The material in each chapter has been updated and largely rewritten. As before, there is a complete description of pre- and postoperative care and end results as well as a detailed description of each operation. At the end of each section is an extended bibliography. This book will be very useful to the medical student and surgical resident. It is also an excellent concise review source for the practicing surgeon.

Roy I. Iritani, M.D.

The Rorschach Systems

By John E. Exner, Jr., Ph.D., 381 pp., \$14.75, Grune & Stratton, 1969.

THIS BOOK TRACES the early history of the ink blot test, involving the pioneering works of Hermann Rorschach and his followers. The bulk of the text consists of a description of the growth of each of the five major systems, noting the differences in administration, scoring, and interpretation. The conclusion is that the systems are not completely different from one another, and that there are many identical or nearly identical features found among the five techniques. But the differences between the systems have been the sources of controversy and, the author contends, the major stimuli of Rorschach research and clinical practice with this psychodiagnostic technique.

The Rorschach Systems is a compact and comprehensive evaluation of the five major Rorschach methods and would be a valuable addition to the readings of clinical psychology students and practicing clinicians.

William T. Tsushima, Ph.D.

Progress in Clinical Pathology, Vol. II

Editor Mario Stefanini, M.D., 385 pp., \$19.50, Grune & Stratton, 1969.

THIS BOOK ATTEMPTS to bridge the gap caused by the period of time which exists between publication of data in a journal and the collection and evaluation of these data in the standard textbooks. It is not intended to be a comprehensive review of pathology but rather selects specific areas in toxicology, virology, immunology, and blood gas analysis. The presentation gives the reader an adequate amount of background material and does not presume advanced knowledge of the subject. Thus it will be of use to students, residents, and physicians in gen-

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eral, as well as to pathologists who need an up-to-date review of a particular area. It is not a technical book, although some specific procedures are outlined. Those who would be using these procedures might have to refer to the list of references for further details.

RICHARD R. KELLEY, M.D.

A Synopsis of Contemporary Psychiatry, 4th Ed.

By George A. Ulett, B.A., M.S., M.D., Ph.D., and D. Wells Goodrich, M.D., 340 pp., \$9.50, The C. V. Mosby Company, 1969.

THIS SMALL TEXT consists of 321 pages and an index. After a brief introduction and eight pages of the history of psychiatric thought, the text formally begins and is divided into three parts. These comprise (1) history taking and diagnostic procedures, (2) clinical syndromes, and (3) therapeutic measures.

This text adheres to its editorial dedication—to make “all sections . . . as brief as possible.” while this results in admirable conciseness, it leaves little meat on the bones for the average mental health professional. On the other hand, Ulett and Goodrich may well provide a fascinating guide for general practitioners interested in psychiatry as well as for lawyers and other professionals concerned with problems in this field.

The sections that I myself read with considerable interest were the 16 pages on psychological testing, the review of the types of individual psychotherapy, and Chapter 30 on forensic psychiatry. These formidable entities are barely introduced to the reader when the end of the chapter is reached. However, the sprinkling of suggested readings lists throughout the text helps to offset this sparseness of the material.

Another possible use of this text could be to give first-year medical students a holistic perception of the field of psychiatry in outline form.

WILLIAM J. T. CODY, M.D.

★Current Concepts in Ophthalmology, Vol. II

By Bernard Becker, M.D., and Ronald M. Burde, M.D., 267 pp., \$21.00, The C. V. Mosby Company, 1969.

THIS WELL-WRITTEN, easy-to-follow book should be read by all ophthalmologists just to learn how well their present concepts coincide with the current accepted concepts in various areas of ophthalmology. The chapters on corneal transplants, fluorescein angiography, cryosurgery of cataract, and dyslexia are well written, so that one can readily use this knowledge in his daily work. The text, by multiple authors from Washington University in St. Louis, has been written particularly for practicing ophthalmologist; yet there is enough in specialized areas such as virology, vitreoretinal pathology, and ophthalmopathy, to provide provocative information relevant to clinical ophthalmology.

WAYNE WONG, M.D.

Patient Care and Special Procedures in Radiologic Technology, 3rd Ed.

By John C. Watson, R.T., 234 pp., \$8.25, The C. V. Mosby Company, 1969.

THIS TEXTBOOK has compiled information concerning the problems of patient care in the field of radiologic technology. Before its publication, formal information in this area was lacking. This book is excellent for use in teaching student technologists and should be available in radiology departments for use by registered technologists.

PEGGY KING, B.S., R.T.

Progress in Medical Genetics, Vol. 6

Edited by Arthur G. Steinberg, Ph.D., and Alexander G. Bearn, M.D., 288 pp., \$16.75, Grune & Stratton, 1969.

THERE IS TODAY a widely acknowledged information gap in the medical sciences. This is due, in some degree, to the fact that the more widely read publications have in the main published isolated experiments or clinical studies, the relevance of which is not always clear to the practicing clinician. Attempts at providing more integrated information have resulted in annual reviews such as *Progress in Medical Genetics*.

Whereas many such reviews present an exhaustive and comprehensive review of literature, the editors of *Progress in Medical Genetics* have encouraged their contributing authors to write critical essays in their particular areas. The result is excellent. Articles are easily read and maintain one's attention longer. More importantly, material is presented in a much more meaningful manner.

The content of the essays, however, is aimed mainly at “students in medical genetics.” It is assumed therefore that the reader is acquainted with the jargon of medical genetics and understands some rather complicated physiological mechanisms. For instance, one must have an understanding of iodine metabolism in order to fully benefit from the chapter on the genetics of thyroid disease. There is a question, therefore, as to how much useful knowledge the practicing physician might obtain from this book.

MAX G. BOTTICELLI, M.D.

Textbook of Pediatrics, 9th Ed.

Edited by Waldo E. Nelson, M.D., D.Sc. (Hon.), Associate Editors Victor C. Vaughan, III, M.D., and R. James McKay, M.D., 1,589 pp., \$21.50, W. B. Saunders, 1969.

ONCE AGAIN Dr. Nelson has come up with one of the leading textbooks of pediatrics. This time, with the help of Drs. Vaughan and McKay and over 50 contributors, the *Textbook of Pediatrics* has been completely revised. Some of the old good material is still present but much new material has been added. For many years now this has been the textbook of English-speaking pediatricians. It is probably the commonest book of pediatrics in use today. This new addition will help it keep its reputation. However, it has lost some of its glamour and is no longer the sole textbook for the general pediatrician or the general practitioner. The reason for this is basically twofold and probably only a personal opinion. The first is that the competition has improved greatly. Barnett's *Pediatrics* is on par with, if not slightly better than Nelson's *Textbook of Pediatrics*. The second is in the process of updating this textbook and including as much material as possible, Dr. Nelson has lost the easy readability of his old textbook. At the same time, a new printing process has been used which has made the print much smaller. Many more paragraphs to the page and thus more information has decreased readability. However, all told, Nelson has maintained his reputation and this would be an excellent book for any pediatrician or general practitioner to keep in his files for reference.

SORRELL H. WAXMAN, M.D.

★Atlas of Human Electron Microscopy

By Rubén P. Laguens and César L. A. Gómez Dumm, 180 pp., \$20.50, The C. V. Mosby Company, 1969.

THE AUTHORS of this book have attempted to provide an atlas of the fine structure of human tissue and have directed its use toward “medical students, pathologists who are beginning study of electron microscopy, and physicians in general.” The format throughout is one of brief discussions on one page related to well-labelled electron photomicrographs on the opposite page. The reproduction of the photomicrographs is very good and most of the photos are large so that detail is easily seen. For

physicians who received their formal medical education prior to the relatively recent and widespread use of the electron microscope, this atlas provides an excellent means of learning how to begin to interpret electron photomicrographs. Since such photomicrographs are becoming increasingly common in clinical as well as research journals, a few hours of study with this atlas should be of value to all physicians.

The authors would seem to have succeeded in their purpose. Although not all physicians may desire to have this volume as part of their personal libraries, it would seem to deserve inclusion in even the more modest-sized hospital or clinic libraries.

ANN B. CATTS, M.D.

Microneurosurgery

By Robert W. Rand, Ph.D., M.D., 224 pp., \$25.00, The C. V. Mosby Company, 1969.

MICROSURGERY has been practiced for years by the otolaryngologists. Now the neurosurgeons are finding that microsurgery definitely has a role in neurological surgery. The nervous system is intricate but the usual techniques of neurological surgery are quite gross. Dr. Rand correctly points out that microneurosurgery will have a definite impact on improving the standards of neurological surgery.

Since the subject of microneurosurgery is new to many, emphasis has been given to basic facts. The microscope and the surgical instruments are explained in detail. The experiences in the various surgical approaches and techniques to such different neurosurgical subjects as acoustic neuromas, the pituitary gland, etc., are discussed. Such a description is extremely helpful to the neophyte, and the many photographs allow you to "see" as they do via the microscope.

The contributors forget that the subject of microneurosurgery will limit the type of readers to those al-

ready versed in neurosurgery. It thus seems that the two chapters devoted to diagnostic tests of acoustic nerve tumors are incomplete and definitely unnecessary.

This reviewer was most impressed with their ability in doing microsurgery, and realizes that practice is essential for proficiency. One wishes that more of their experience in intracranial microvascular surgery could have been given. However, this may be forthcoming in another publication.

THOMAS SAKODA, M.D.

★The Role of Learning in Psychotherapy

A Ciba Foundation Symposium, Edited by Ruth Porter, 340 pp., \$12.00, Little, Brown & Company, 1968.

THIS VOLUME is a collection of papers from a symposium held under the auspices of the Ciba Foundation which brought together major figures from the fields of psychoanalysis, learning theory, and behavior therapy. Behavior therapy, operant conditioning, and the like have risen in recent years as serious challenges to psychoanalytic theory and treatment. Psychoanalytic approaches stem from the studying subjective experiences and unconscious motivations and depend on the development of "insight" as a means of ameliorating or changing a patient's condition; on the other hand, learning theories, and more specifically behavior therapies focus on habits and reflexes, stimuli and responses, and feel that these are fundamental and need to be changed in pathological states.

As might be expected, two such diverse approaches to the problem of psychological illness tend to raise the hackles of the proponents of either side whenever they meet. Happily, this is not the case with this symposium. With such luminous figures as psychoanalyst Lawrence Kubie on one hand, and behavior therapist Arnold Lazarus on the other, frank, open, and rational presenta-

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tions are made for both points of view. It is interesting to note, however, that in discussing how he might actually work with a patient, Dr. Lazarus' approach was not very different from that of those who use brief psychoanalytically oriented psychotherapeutic methods. His techniques, however, are generally more specific and tend to be more structured than those offered by dynamically oriented psychotherapists. In general this is a most stimulating book, and I recommend it without reservation to all practicing psychiatrists as a lucid discussion of a most pressing issue in psychiatry today.

K. Y. LUM, M.D.

Oral Cancer (Interprofessional Symposium)

Sponsored by Cancer Control Program, Health Services and Mental Health Administration, Public Health Service, U.S. Department of Health, Education, and Welfare, 104 pp., \$1.25, U.S. Government Printing Office, 1966.

THIS MONOGRAPH may be of some interest to those not already familiar with the problems of oral cancer, and indeed, the main theme of the symposium that is reported was "The Education and Early Diagnosis of Cancer of the Oral Cavity."

However, there was nothing that was new in the book, and those chapters that dealt with the diagnosis, were very scanty in clinical description of lesions that might be considered precancerous or indeed benign.

It perhaps serves its most useful purpose by underlining the fact that there are interest in, and programs for, education of the various health professions that might be concerned in the early diagnosis of oral cancer.

JOHN R. WATSON, M.D.

★Manic Depressive Illness

By George Winokur, A.B., M.D., Paula J. Clayton, B.S., M.D., and Theodore Reich, B.Sc., M.D., C.M., 186 pp., \$6.50, The C. V. Mosby Company, 1969.

EACH PAGE of this very well written book of 186 pages contains pertinent and useful information, with good references.

It provides a good review of the manic depressive illness, starting with historical data and bringing it up to date with current theories and treatment methods. The strength of this book lies in the fact that it explores the illness from every standpoint, social, epidemiologic, genetic, clinical, etc., and seems to devote equal interest to each area without placing over-emphasis on one.

Although not a large book in terms of its size and price, it is a very comprehensive text for those interested in this disorder.

HENRY K. WATANABE, M.D.

★Fundamentals of Inhalation Therapy

By Donald F. Egan, M.D., 474 pp., \$11.00, The C. V. Mosby Company, 1969.

THIS EXCELLENT VOLUME is the best to appear in its field thus far. It is packed with information that will prove useful to physicians, nurses, as well as technicians. Much practical as well as theoretical information is presented. Dr. Egan's book deserves to be in all hospital libraries.

BERNARD YIM, M.D.

Plastic and Maxillofacial Trauma Symposium, Vol. I

Editor Nicholas G. Georgiade, D.D.S., M.D., F.A.C.S., and seven Coeditors, 221 pp., \$25.00, The C. V. Mosby Company, 1969.

THIS COLLECTION of papers presented at an educational seminar for plastic surgeons held at Walter Reed Army Hospital in 1967, although written for the specialist, will be of interest to anyone treating facial injuries.

The first six chapters cover the handling of casualties in Vietnam. With the exception of chapter five, which is a good review of the resuscitative measures necessary following severe facial injuries, this section of the book is of very limited interest and value.

The sections devoted to the treatment of facial fractures are somewhat disorganized. There is considerable repetition, as several authors cover aspects of the same topic. Dingman and Natvig's *Surgery of Facial Fractures* is a better organized source of information, and it is interesting to note that the majority of the illustrations in this symposium were borrowed from their book.

The latter portions are devoted to special considerations and conditions and contain some of the most useful and original contributions to the book. Millard's chapter on the principles of soft tissue repair is particularly outstanding, and should be studied by every intern, resident, and practitioner charged with the responsibility of closing a facial wound.

This volume is a fairly comprehensive reference for the physician who treats an occasional facial injury.

VICTOR HAY-ROE, M.D.

Also Received

★Fetal Homeostasis, Vol. 4: Proceedings of the Fourth Conference

Edited by Ralph M. Wynn, M.D., 304 pp., \$16.00, Appleton-Century-Crofts, 1969.

THIS IS AN EXCELLENT monograph on a highly specialized subject, fetal homeostasis, which was approached by a multidisciplinary approach. It is highly recommended for those with special interest in this area.

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Crisis Fleeting

Edited by James H. Stone, 423 pp., \$3.75, U.S. Army Medical Corps, Office of the Surgeon General, Department of the Army, U.S. Government Printing Office, 1969.

THIS MEDICAL MILITARY documentary is composed of five front line experiences in India and Burma in the 2d World War. The important role of medical support for combat troops is again documented.

Nepal Health Survey 1965-1966

By Robert M. Worth, M.D., M.P.H., Ph.D., and Narayan K. Shah, M.B.S., M.P.H., 158 pp., \$4.50, University of Hawaii Press, 1969.

AN INTERESTING and revealing survey which originated from efforts in Hawaii. Although not applicable to Hawaii, it shows in what direction comprehensive health planning can be approached for an area with many health needs. The effects and benefits of such a survey remain to be seen, but the method of approach in this text is to be commended.

Legal Implications of Emergency Care

By Neil L. Chayet, LL.B., 342 pp., \$6.95, Appleton-Century-Crofts, 1969.

AN EXCELLENT synopsis of this timely and relevant subject, which needs to be understood by more physicians.

Urinary Tract Infection in Childhood and Its Relevance to Disease in Adult Life

By Victoria Smallpeice, M.A. (Oxon), M.D., (Lond) FRCP, 171 pp., \$9.50, The C. V. Mosby Company, 1969.

AN EXCELLENT MONOGRAM on a common clinical problem which is recommended for urologists, pediatricians, internists, and obstetricians. ■

Notes & News continued from 313

yama, and Alan Pavel as Fellows at their annual meeting in January. We were intrigued with the heading, "A Hawaiian Specialist Admitted to American College of Cardiology" but then discovered that the specialist was neither Hawaiian, nor a Hawaiian lore specialist, but our Mort Berk, who recently became a Fellow of the ACC. T. K. Lin, ACC Governor of Hawaii, announced the appointment.

On the political front, Gov. Burns appointed K. Y. Lum, Unoji Goto, Perry Sumida, Allen Richardson, Truett Bennett, and Roger Brault to a medical advisory board for setting standards for the State highway safety program. Ed Matsuoka was newly appointed to the

Board of Medical Examiners and William Dang and Louis Rackett were reappointed.

On the Tong front, Peter Larm was elected assistant treasurer of the Pun Tao (Birthday) Club and on the "united" front, Masato Hasegawa was elected one of six vice-presidents of the Aloha United Fund.

Milton Hawell's election as Hawaii's Doctor of the Year was the subject of an article in the March issue of *Today's Health*.

Professional Moves

The Year of the Dog is with us and doggonit if we aren't losing Audrey Mertz, who resigned as director of the State's Mental Health Division to become director of a mental health center in Ketchikan, Alaska. We will sorely miss Audrey, who is responsible for many innovations in the mental health field, including the 1968 Mental Health Law, the Children's Day Treatment Center, and an adolescent program at the State Hospital. Audrey would like to see a separate intensive supervision ward at the State Hospital for potentially dangerous patients judged by the court to be mentally not responsible for violent crimes.

In January, internist Werner Schroffner joined the Fronk Clinic, neurologist Jordon Popper relocated to the King-McKinley Bldg., and otolaryngologist Walter Yokoyama moved to 305 Royal Hawaiian Ave. when E. R. Austin retired and left the islands. Lo's Taylor in her column says that Walt's wife Jean has been recruited as his "girl Friday."

In February, we welcomed back ophthalmologist Shigemi Sugiki to the Straub Clinic. Shigemi, as you recall, was abruptly activated with the 29th. Don Poulson and Gabe Ma moved upstairs to Suite 435 from Suite 200 at 1481 South King St.

Visiting Physicians

Herbert Griswold, stout, jowled, pleasant-voiced professor of medicine and head of cardiology at the University of Oregon School of Medicine, lectured on surgical treatment of coronary heart disease: angiographic and electrocardiographic correlation. He feels that with a good team, vein bypass grafts have a lower mortality than internal mammary implants, and suffer from fewer infarctions postoperatively. No long-term results are available, however, on whether or not surgerized [shudder!—Ed.] patients live longer than those left on a medical regimen. Vein grafts are recommended only in patients with severe long-standing angina, and in acute MI patients who go into shock and congestive failure (since their survival rate is only 15 percent).

Ronald Pion, director of family planning and sex education at the University of Washington School of Medicine, was U of H visiting professor. Ronald feels that doctors sometimes have to break laws that keep

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them from responding to their patient's needs. "If a doctor puts the law in front of his response to patients, I think less of him as a physician. . . . There are certain types of laws that detract from a doctor's ability to respond meaningfully to his patients," he said, and cited "laws against contraception for teenagers, abortion laws, and certain drug laws. . . ."

Raymond W. Waggoner, Jr., chief of psychiatry at U of Michigan, was the Queen's Visiting Professor. He pointed out that the trend in mental health professions was toward more outpatient clinics and much less inpatient treatment. "There is a trend toward setting up satellite mental health clinics, oriented to a central medical center, which is generally associated with a university medical school. But this is impossible unless the state has a four-year medical school to furnish manpower."

Stuart Finch, professor of psychiatry also from U of Michigan, participated in the U of H psychiatry training program. Stuart feels that the population explosion is at the root of increasing mental illness among children and youth as well as the growing shortage of psychiatrists, and other mental health professions and medical specialists. He says, "You can take any animal and breed it in a limited space to densities that cause outbursts of aggression in some individuals and withdrawal from reality in others. Man is no different in this respect from other animals."

Members Speak Up

The columnists, especially the sports writers, make hay with **Richard You's** letters and pronouncements and frankly, we think he enjoys it. Eddie Sherman says, "Dr. Richard You has to be a girl-watcher deluxe. No matter what city he's visiting on his European trip, he post cards: 'I was amazed to see so many beautiful females with miniskirts. They walk and glide like queens.'" Hal Wood, Advertiser Sports Editor, says, "If you can believe Dr. Richard You, and others in the know on Olympic doings, Russia will be the site of the 1976 Olympic games. Dr. You says, 'Russia is a cinch to get the games. You can be darned sure the Russians checked the delegates and found they had enough votes to swing the games there before they ever even considered making a bid. Shucks. They could win 'em just as a novelty.'"

John C. Roberts writes: "Sir: Pendulums, if I may coin a phrase, certainly do swing." John points out that two years ago, he had suggested that the newspapers distinguish between support for our troops in Vietnam as men and support for the misguided policies that put them there. "There is now a new leap of illogic being made by many segments of our society to the effect that recognizing the failure of our policy, we can correct it by pulling all our troops home. . . . If tragedies such as Hue are re-enacted when we withdraw, or masses of peoples are left destitute, the Viet Cong may be to blame

for the script, but we shall have provided the stage and the props. . . . We should allow time for our government and agencies of humanitarian concern to search out every possible way in which the transition ahead can be made with a minimum of barbarity and suffering." (Good for John!)

J. L. Erickson, commenting on the wanton killing of unarmed civilians in Vietnam and the military interrogation procedure of throwing people out of helicopters, writes: "As we live our fat, dumb and happy life here in the good ole U.S.A. we cannot be expected to realize what incredible things happen to people in the military when they are placed under stress. . . . It's time we all realized that man is a vicious, unthinking, uncompromising animal if allowed or made to be so. . . . If we recognize these facts of human nature, we can prevent atrocities, even though they have occurred with great regularity since first recorded history, by preventing the stresses that bring out the unthinking killer responses in human beings, simply by preventing war. I don't think this objective can be accomplished, but I think we should be willing to try." (Horrors!)

Our favorite commentator, **Fred Reppun**, writes: "It is always a pleasure to listen to Bill Buckley use the English language; it is much easier to read him. It is very difficult, however, to recall what he said. . . ."

Fred got his rare dander up about the splitting of the ILH into public and private school leagues. Fred says: "Has anyone thought to ask the kids themselves how they feel about breaking up old and traditional rivalries? Will the public school players be satisfied with a so-called championship, knowing that under new rules they will only have played against second raters? It seems to me that the adults involved in this decision on the part of the DOE are more concerned with prestige than sport."

Annual Hawaii Dermatological Society Meeting

We have always maintained that the dermatologists put on the best medical conferences so we happily accepted **Ed Emura's** invitation to their first annual clinic and dinner meeting. True to form, we first made rounds on a slew of patients with such exotic conditions as LE profundus, mycosis fungoides, focal amyloidosis, lichen myxodematosus, etc. (cases we read about, but seldom see). But then, it has also occurred to us that we may have seen some without recognizing them. After a gourmet's delight of veal scaloppini, **Harry Arnold** moderated the slide session. Members discussed each case and **Bob Kim** gave the microscopic findings. When a patient with pseudoxanthoma elasticum was described as "a 32-year-old female," our pedantic editor (who is usually right, of course) insisted that "woman" better described the human female species and that "man" was preferable to "male." When someone interjected, "How about 'lady'?" Harry retorted, "lady requires a value judgment." The

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patient apparently improved with Vitamin E therapy and there ensued a friendly banter on the rationale for vitamin E use. Visiting dermatologist **Rees B. Rees** offered, "The rationale is that vit E is a vitamin looking for a disease, and this may be the disease." Another suggested the use of vitamin E for sterility and **Harold Johnson** popped up with, "that's why I use it." We learned that necrobiosis lipoidica, an erythema nodosum-like lesion of the shin is "the calling card of the diabetic state." During the discussion of atrophoderma (with simply fascinating violaceous atrophic plaques), **Rees B. Rees** quipped, "In the immortal words of Spiro Agnew, 'If you've seen one, you've seen them all.'" During a discussion of a patient with LE, livedoid vasculitis, and peptic ulcer, **Harold Johnson** warned, "I started one patient's ulcer bleeding 48 hours after a single dose of Kenalog 40mg." **Harry Arnold** sympathized, "You probably took away her only other emotional outlet." After reviewing a patient with Klinefelter's and anhidrosis, **Norman Goldstein**, who is not known for his brevity, admitted, "All I can say is that it is a strange looking skin."

Doctors in Print

Pelvic Endometriosis, p. 818, Current Therapy, 1969, Robert W. Noyes, M.D.

MD, April, 1969: "Robert Jim reported at a recent meeting of the American College of Physicians in Hawaii that the incidence of leukemia on the islands increased from 1944 to 1963, but seems to be leveling off. Acute lymphoblastic leukemia is the type most commonly seen in children, while the myeloid, monocytic or myelomonocytic forms of the disease afflicts adults. Chronic lymphocytic leukemia is rare in Japan and China, but more common among individuals from these countries who migrated to Hawaii, possibly because of some environmental change or better diagnosis. . . ."

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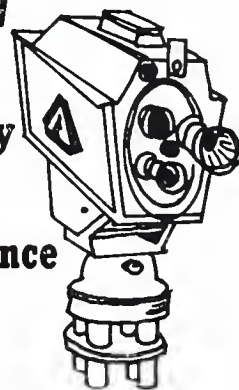
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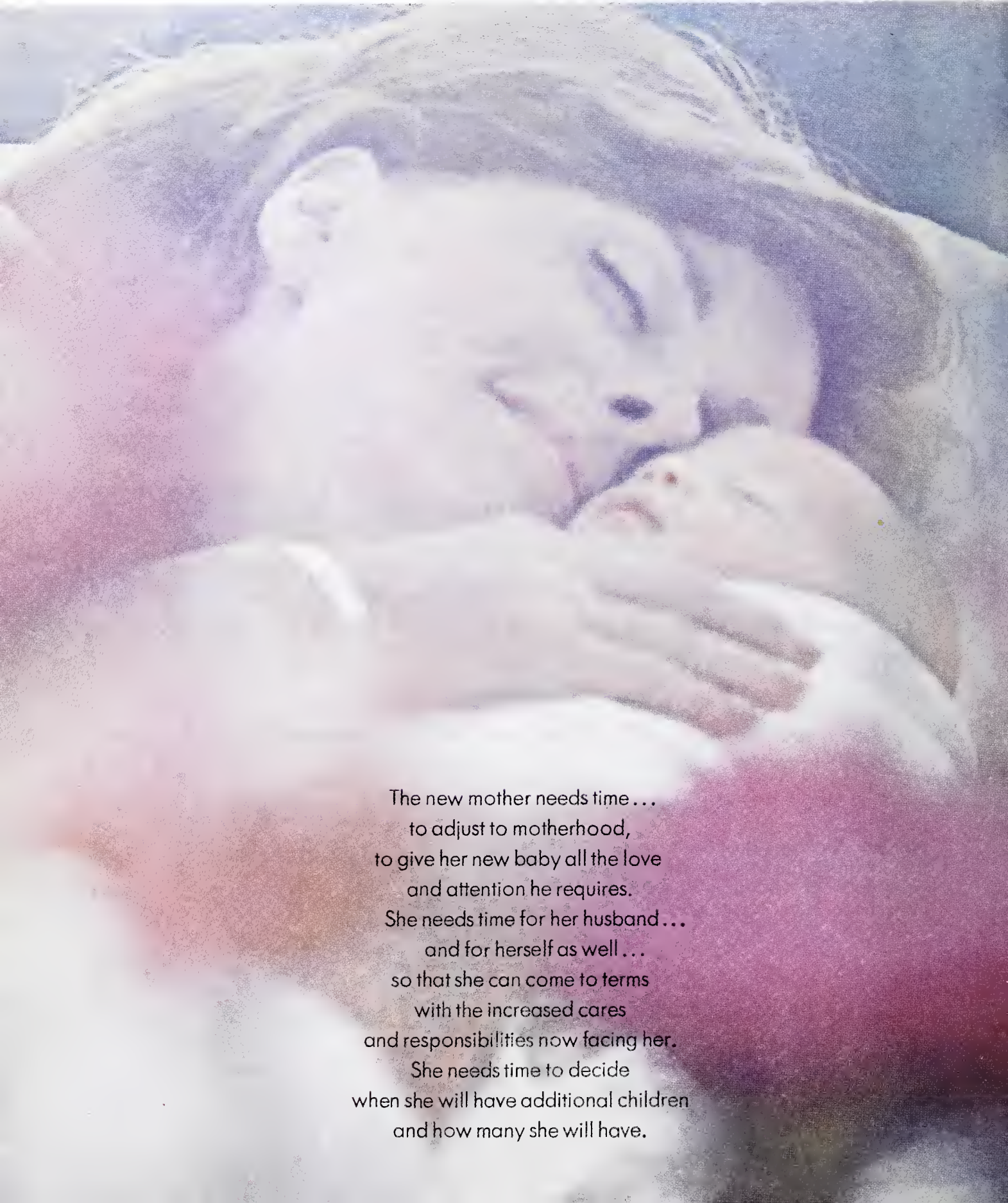
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Actions—Ovulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain¹⁻³ leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates in the United States found relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives. This has not been confirmed in the United States.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for 2 months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives

—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values; metyrapone test and pregnanediol determination.

1. Royal College of General Practitioners: Oral Contraception and Thromboembolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967.
2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968.
3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969.
4. American Journal of Epidemiology (to be published).



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Contraindicated: Known hypersensitivity to the drug. Children under

6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective

amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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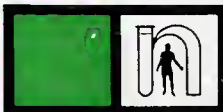
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and jitteriness. In contrast, CNS depression has been reported. In a few cases, an increase in convulsive episodes has been reported. Sympathomimetic vascular effects reported include ones such as tachycardia, precordial arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was on isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as urticaria, ecchymosis, and erythema. Gastrointestinal effects such as dry mouth, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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cross the placental barrier and appear in breast milk; thus adverse reactions which have occurred in adults may occur in the fetus or newborn infant. Rarely, thrombocytopenia or pancreatitis has developed in newborn infants whose mothers had received thiazides during pregnancy. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte determinations. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Adjust dose of antihypertensive agents given concomitantly.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, altered carbohydrate metabolism, hyperbilirubinemia, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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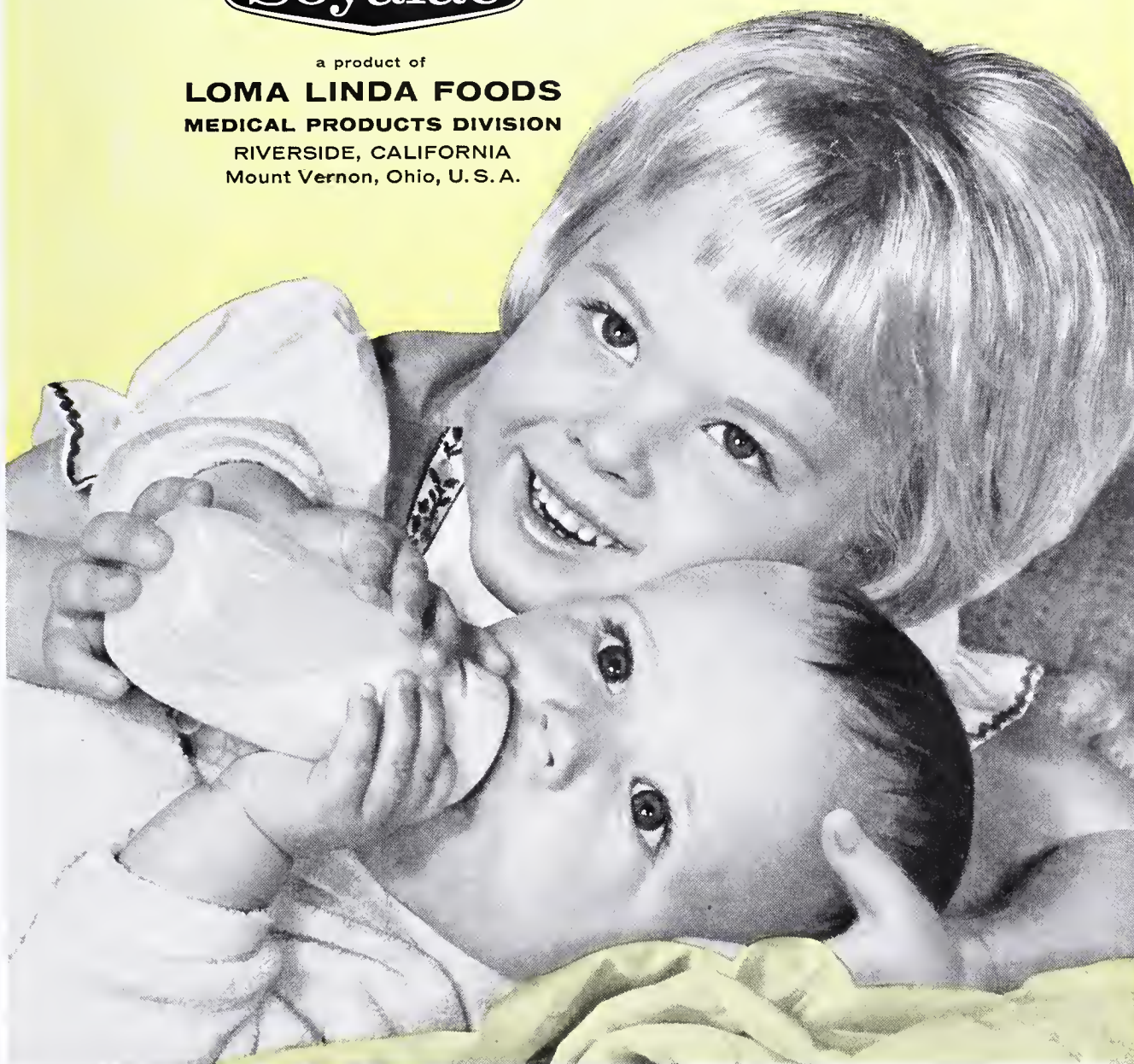
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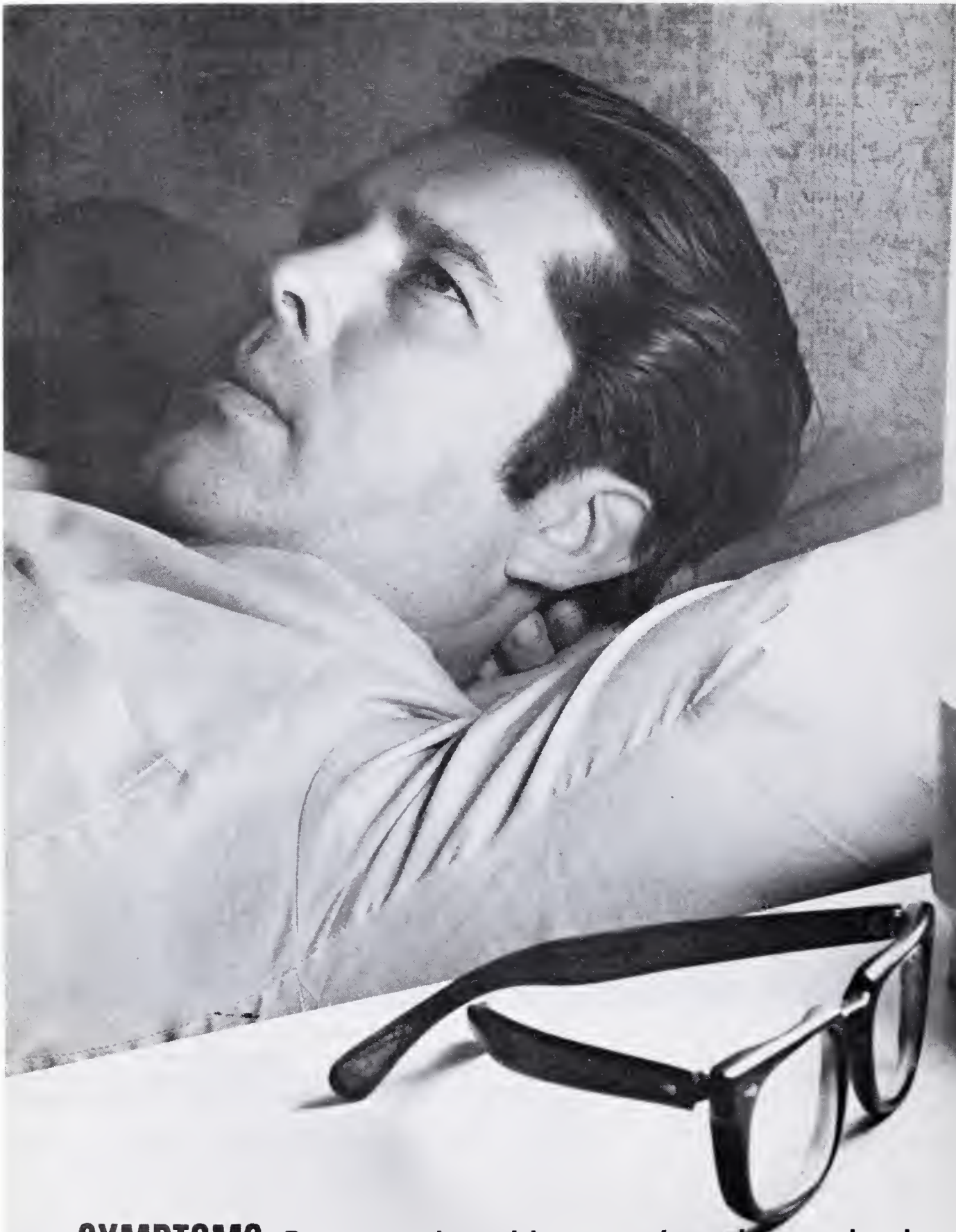
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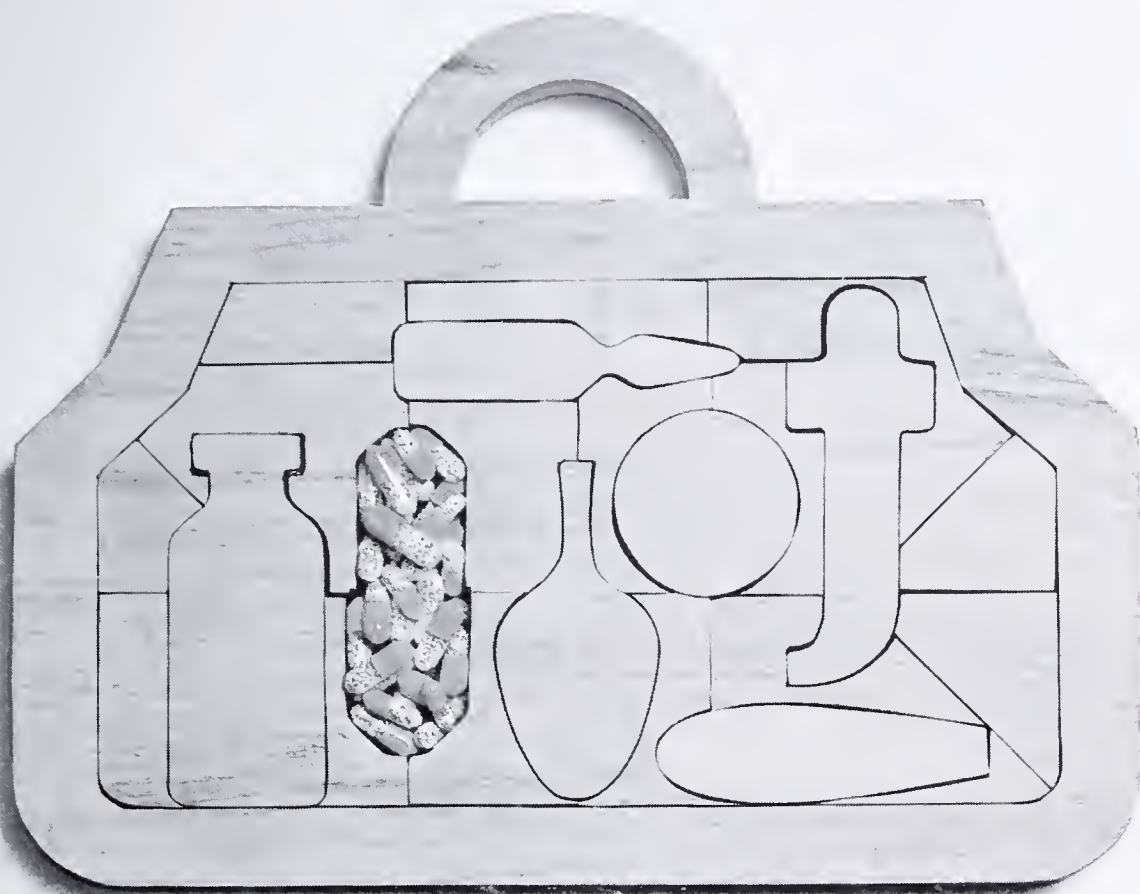
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Indications: NegGram is indicated for the treatment of urinary tract infections caused by sensitive pathogenic organisms. Disc sensitivity testing with the 30 mcg. disc is recommended. NegGram is particularly useful against gram-negative bacteria (e.g., *Proteus*, *E. coli*, *Aerobacter*, *Klebsiella*, and a few strains of *Pseudomonas*).

Warning: *Usage in Pregnancy.* Safe use of NegGram during the first trimester of pregnancy has not been established. However, the drug has been used during the last two trimesters without producing apparent ill effects in mother or child.

Precautions: Blood counts and renal and liver function tests should be performed periodically if treatment is continued for more than two weeks. NegGram should be used with caution in patients with liver disease, severely impaired kidney function, epilepsy, or severe cerebral arteriosclerosis.

Patients should be cautioned to avoid undue exposure to direct sunlight while receiving NegGram. Therapy should be discontinued if photosensitivity occurs.

Bacteria resistant to NegGram may emerge rapidly. Therefore, cultures and bacterial sensitivity tests should be repeated if the clinical response is unsatisfactory or if a relapse occurs.

When Benedict's or Fehling's solutions or Clinitest[®] Reagent Tablets are used to test the urine of patients taking NegGram, a false-positive reaction for glucose may be obtained, due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (e.g., with Clinistix[®] Reagent Strips or Tes-Tape[®]) does not give a false-positive reaction to the liberated glucuronic acid. Incorrect values may be obtained for urinary 17-keto and ketogenic steroids in patients receiving NegGram, because of an interaction between the drug and the *m*-dinitrobenzene used in the usual assay method. In such cases, the Porter-Silber test for 17-hydroxycorticoids may be used.

Adverse Reactions: Gastrointestinal disturbances include abdominal pain, nausea, vomiting, and diarrhea. Allergic reactions include rash, pruritus, urticaria, angioedema, eosinophilia, and joint stiffness and lethargy. Other reactions have been drowsiness, weakness, headache,

dizziness and vertigo, and rarely, anaphylactoid reaction, cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with a deficiency in activity of glucose-6-phosphate dehydrogenase. Photosensitivity reactions, primarily involving exposed skin surfaces, have disappeared after therapy was discontinued.

Reversible subjective visual disturbances without objective findings have occurred infrequently (generally with each dose during the first few days of treatment). These reactions include overbrightness of lights, change in color perception, difficulty in focusing, decrease in visual acuity, and double vision. They usually disappeared promptly when dosage was reduced or therapy was discontinued.

Toxic psychosis or brief convulsions have been reported rarely, usually following excessive doses. In general, the convulsions have occurred in patients with predisposing factors such as epilepsy or cerebral arteriosclerosis. In infants and children receiving therapeutic doses of NegGram, increased intracranial pressure with bulging anterior fontanel, papilledema, and headache has occasionally been observed. Although the mechanism of this phenomenon is unknown, the signs and symptoms disappeared rapidly with no sequelae when treatment was discontinued.

Dosage and Administration: *Adults.* The recommended dosage for initial therapy in adults is 1 Gm. administered four times daily for one or two weeks (total daily dose, 4 Gm.). For prolonged therapy, the total daily dose may be reduced to 2 Gm. after the initial treatment period.

Children. Until further experience is gained, NegGram should not be administered to infants younger than one month. Dosage in children 12 years of age and under should be calculated on the basis of body weight. The recommended total daily dosage for initial therapy is 2 mg./lb./day (55 mg./kg./day), administered in four equally divided doses. For prolonged therapy, the total daily dose may be reduced to 15 mg./lb./day (33 mg./kg./day).

How Supplied: Caplets[®] of 250 mg., scored, bottles of 56 and 100; Caplets of 500 mg., scored, bottles of 56, 500, and 1000.

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The neighbors are wonderful.**



Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient, if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine,

mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand

and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels, and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy (CNS stimulants and pressor amines as indicated). Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

The young homemaker: her underlying anxiety and tension can surface and intensify under the continuous stress of rearing a growing family. Especially when she's confined to the home and its environs so much.

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(meprobamate)

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Philadelphia, Pa.



Photo professionally posed

A black and white close-up photograph of a woman's face, showing her eyes, nose, and mouth. She has a concerned or anxious expression. Her hair is dark and voluminous.

**I'll scream
if I don't get away!**

A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."^{*} However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A[®] base.[†]

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is



practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.

^{*}McClarin, W. M., and Knox, J. M.: *Cutis* 3:619 (June) 1967.

[†]The MICEL A[®] base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

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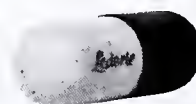
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Contraindications: Hypersensitivity to tetracycline.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Nonsusceptible organisms

may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative

dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN.

Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis.


Intracranial—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

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BRIEF SUMMARY

PREMARIN® (conjugated estrogens—equine).

Indication: PREMARIN is specific for replacement therapy of the estrogen deficiency state characteristic of the menopause and the postmenopause.

Caution: *In the female:* To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—

Withdrawal bleeding may occur during this 1 week rest period).

In the male: Continuous therapy over prolonged periods of time may produce gynecomastia, loss of libido, and testicular atrophy.

Suggested Usual Dosage: Menopausal and postmenopausal estrogen deficiency—PREMARIN: 1.25 mg. to 3.75 mg. daily, depending on severity of symptoms. Dosage should be tailored to individual needs of patient. Cyclic administration is recommended (3 weeks of daily estrogen therapy and 1 week off).

If patient has not menstruated within last two months or more, cyclic administration is started arbitrarily. If patient is menstruating, cyclic administration is started on day 5 of bleeding.

Note: If breakthrough bleeding occurs (bleeding or spotting during estrogen therapy), increase estrogen dosage as needed to stop bleeding. Continue this individualized dosage in subsequent cyclic regimen. *Failure to control bleeding or unexpected recurrence is an indication for curettage.*

Atrophic vaginitis, pruritus vulvae: Cyclically, 1.25 mg. to 3.75 mg. or more is given, depending on tissue response of individual patient.

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The okuu of 1804—probably Asiatic cholera—quite likely killed closer to 5,000 than the 175,000 which it's been credited.

The *Okuu*—Hawaii's Greatest Epidemic

ROBERT C. SCHMITT, *Honolulu*

HISTORIANS HAVE for many years described the *okuu* as Hawaii's greatest epidemic. This disease, thought by some authorities to have been cholera, struck Oahu around 1804. Over one-half of the population of the kingdom, perhaps as many as 175,000 persons, were said to have died from it. Mortality of such magnitude would make the *okuu* the most catastrophic event in Island history, far surpassing all other disasters of recorded history, and leaving lasting scars on the social, political, demographic, and economic character of the archipelago. In spite of its apparent importance, it has surprisingly rated only a few lines in most general histories, and no systematic analysis of its reported mortality has so far appeared in print. The present paper is accordingly concerned with this question: How many persons did the *okuu* kill?

Many writers have contended that one-half, or even a majority, of the population died in this epidemic, but others have been more conservative. Some applied these rates to the entire kingdom, while a few limited them to Oahu. One source confined mortality to two-thirds of an army of 8,000, another gave it as one-eighth of the total population, and a third suggested annual crude death rates of either 441 or 482 per 1,000 inhabitants in the year of the plague. A few have proposed absolute figures: 22,000 (on "Oahu alone"); 112,000-128,000 (net decline for all islands); and 175,000. Others have been satisfied with broad descriptive terms, such as "a vast number," "multitudes," or "dreadful havoc." One skeptic attributed the higher figures to "legendary exaggeration," and many later writers have remained cautiously noncommittal. General agreement as to the great severity of the epidemic has thus been accompanied by widely varying opinions in respect to actual mortality levels.

This lack of consensus extends to the Hawaiian name, diagnosis, origin, geographic extent, and year of the *okuu*. Initially referred to simply as "a disease," "plague," or "epidemic," it eventually was described by a number of Hawaiian names: *ikipuahola*, *po'okole*, *mai ahulau*, *kauokuu*, *mai*

okuu, *ahulau okuu*, or, most commonly, *okuu*. Most authorities have identified it as cholera or possibly bubonic plague, but two of the earliest described it as yellow fever and some of the most recent have suggested dysentery, typhoid fever, or a "vomiting illness." A contemporary observer reported that the *okuu* was brought by an American ship, a later student blamed Krusenstern's ships, and a third suggested that its origin was China by way of the sandalwood trade. Considerable dispute is evident as to whether the epidemic was confined to Oahu or spread throughout the kingdom. Although most historians have dated its onset as 1804, at least one writer can be found in favor of each of the years from 1802 to 1807.

The sources for these statements differ widely in credibility. The chief contemporary reference was based on hearsay. The most frequently cited descriptions were not put into writing before 1835, or even the 1860's. The recollections of unnamed oldsters were usually the basis for these accounts. Like earlier tales of Hawaiian battlefield mortality, the estimates of the *okuu* toll seemed to grow with every passing year.

The earliest recorded reference to the *okuu* was that of Urey Lisiansky, who visited Kealakekua, Hawaii, and Waimea, Kauai, in June, 1804. Under date of June 18, Lisiansky wrote:

On leaving Carracocoa [Kealakekua], I proposed making for the island of Wahoo, to see the king of Owhyhee, who was there with his army. . . . Learning, however, that a species of epidemic disease was raging in that island, I relinquished my intention, and took my course for Otooway [Kauai].¹

The following day he wrote: "I informed him [Tamoory (Kamualii), ruler of Kauai] that the king was at present on the island of Wahoo; and that he would have been at Otooway long ago, but for an epidemic disease, which had spread amongst his troops, and would perhaps oblige him to relinquish his conquests, and return home."² Lisiansky later noted: "By Mr. Young's account, the forces of Hamamea now consist of about seven thousand natives and fifty Europeans."³

William Mariner was the second person to record the *okuu*. On October 10, 1806 his ship

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"came to an anchor in Anahooroo Bay. Whilst waiting for an opportunity to enter the close harbour, the inhabitants came on board and traded. In the mean time, the chief of the island, hearing that they had a sick man on board, refused them permission to enter the close harbour, being afraid of introducing disease into the country, which calamity had happened on a former occasion, from an American ship."⁴ It is not clear whether this account, written sometime after 1811 and published in 1817, was based on notes made during Mariner's voyage or on his later recollections.

The third published reference to an epidemic at this time was made by Isaac Iselin. While visiting Kealakekua on May 22, 1807, Iselin wrote: "The depopulation is evident and may, in some manner, be accounted for, by the absence of the chiefs and warriors, and still more for a kind of epidemic or yellow fever, said to have been brought to these Islands a few years ago, and which makes dreadful havoc amongst the natives."⁵

Other visitors during this period surprisingly failed to mention the epidemic. Among this group were Richard J. Cleveland, a visitor to Hawaii, Maui and Oahu during the summer of 1803; G. H. Von Langsdorff, on the Big Island in June 1804; William Shaler, on Hawaii, Oahu and Kauai from August 19 to October 27, 1805; Samuel Patterson, who reached the Big Island in December 1805; an unnamed sea captain, a visitor sometime before August 1806; Amasa Delano, on Oahu in September 1806; and "a respectable American" who was living on Maui during the catastrophic drought and famine of 1806-1807.⁶ Shaler, incidentally, observed only "700 men under arms" but was told by Kamehameha that "if I would agree to wait a few days, he would assemble ten times the number."⁷

No further mention of the *okuu* appears in the literature until April 20, 1822, when Tyerman and Bennet, then visiting Oahu, briefly referred to it:

In the year 1804, when the late king, Tamehameha, was on his way from Hawaii, to invade Tauai, he halted with an army of eight thousand men at Oahu. The yellow fever broke out among the troops, and in the course of a few days swept away more than two thirds of them.⁸

The toll thus indicated soon began to grow. Ellis, a resident during 1822 and 1823, attributed "the rapid depopulation which has most certainly taken place within the last fifty years" in part to "the ravages of a pestilence brought in the first instance by foreign vessels, which has twice, during the above period, swept through the islands."⁹ After a tour "a few miles east of Honoruru" in February 1828, Levi Chamberlain wrote:

The land all around for several miles has the ap-

pearance of having been once under cultivation. I entered into conversation with the natives respecting its present neglected state. They ascribed it to the decrease of population. There have been two seasons of destructive sickness, both within the period of thirty years, by which, according to the account of the natives, more than one half of the population of the island was swept away. The united testimony of all of whom I have ever made any inquiry respecting the sickness, has been that, "Greater was the number of the dead, than of the living."¹⁰

The first native description of this disease was that written by some of the older students at Lahainaluna about 1835-1836.¹¹ They stated that Kamehameha moved to Oahu around 1802, "where he was seized by a malignant epidemic, then common, from which he recovered, but which proved fatal to a multitude of his subjects, and by which his remaining counsellors were cut down."¹² They added that "the majority of the inhabitants [were] cut down by it. No proper care could be taken of the sick. Men perfectly well in the morning were dead in the evening. . . . This sickness, called *kauokuu*, greatly diminished the population."¹³

David Malo later elaborated on this account. In an article, published in 1839, he wrote: "In the reign of Kamehameha, from the time I was born (1793) until I was nine years old, the pestilence, (*mai ahulau*,) visited the Hawaiian islands, and the majority (*ka pau nui ana*) of the people from Hawaii to Niihau, died."¹⁴ In a much longer work prepared about 1840, Malo added:

During Waia's reign [in ancient times] Hawaii nei was visited by a pestilence, *mai alulau*, which resulted in a great mortality among the people. Only twenty-six persons were left alive, and these were saved and cured by the use of two remedies, *pilikai* and *loloi*.

This pestilence was called *ikipuahola* by the ancients.

Kama, the Hawaiian medicine-man (*kahunalapaau*), gave it as his opinion that the *ikipuahola* was of the same nature as the *okuu*, the pestilence which appeared in 1804 in the reign of Kamehameha I.

Kama made this statement to his grandson Kuauau, and one year before the appearance of this pestilence Kama foretold its arrival. The circumstances were as follows:

Kamehameha was at Kawaihae, making preparations for his *pelelen* expedition to Oahu. At that time Kama was taken sick unto death, when he made the following statement to Kuauau.

"I am about to die, but you will witness a great pestilence that is soon to make its appearance among us. You will doubtless be weary and worn out with your labors as a physician, because this is the same disease as that which raged in the time of Waia. . . ."

"How do you know that this disease is the same as *ikipuahola*?" asked Kuauau. To this Kama answered,

"My instructor once told me that if a distemper associated with buboes (*hahai*) and a skin eruption (*meeau*) were to show itself, a short time thereafter this disease would make its appearance. So the ancients told him, and so my preceptor Kalua told me."

After that Kamehameha sailed for Oahu and the pestilence in truth made its appearance, raging from Hawaii to Kauai. A vast number of people died and the name *okuu* was applied to it.

After Waia's time another pestilence called *hai-lepo* invaded the land and caused the death of a large number of the people. Only sixteen recovered, being saved by the use of a medicine which was composed of some kind of earth (*lepo*).¹⁵

Jarves reported that "the great pestilence of 1803 destroyed multitudes, and has been supposed to have partaken of the character of the Asiatic Cholera."¹⁶ He asserted that it spread from Kamehameha's army to the rest of Oahu, and added: "Three hundred dead bodies are said to have been carried out to sea from Waikiki in one day."¹⁷

Still another description appeared in a long article in the *Pacific Commercial Advertiser* on November 6, 1862: "The old natives on Hawaii still speak of it with a kind of horror and dread, and describe it as the most terrible scourge that ever visited the group, causing wailing in every house. . . . From the descriptions which have been given by those who witnessed it, physicians believe it to have been the *Asiatic cholera* . . . The most reliable accounts and verbal traditions state that the plague took off more than *one-half of the population* . . . [and] the population was reduced in two years from 350,000 to 175,000 . . ."

The next contribution was made by W. Kahala, a resident of Kekaha, Puna, Hawaii. On January 31, 1863, Mr. Kahala wrote to *Ka Nupepa Kuo-koa* that he had "inquired of an ancient man of the reign of Kamehameha I, regarding a disease called *Okuu*" and had received the following reply:

The Okuu was the pestilence which had claimed the lives of many men, women and children and it also took the majority of the population in death. There was no other disease equal to this one. The number of deaths daily from here and there in these islands was 40 in some places, 80 in other places, 120 in some parts, 400 in still other parts and there were less than 40 deaths in some places. The death toll was greater where there were more people.

The length of time in which this epidemic devastated the population was probably almost three months or more with many deaths occurring from day to day.¹⁸

Lorrin Andrews' *Dictionary*, published in 1865, said that the *okuu* was so called "because the people okuu wale aku no i ka uhane, i.e., dismissed freely their souls and died." Andrews dated

the epidemic in 1807.¹⁹

Additional clinical details were provided by Samuel Kamakau in 1867: "It was a very virulent pestilence, and those who contracted it died quickly. A person on the highway would die before he could reach home. . . . The body turned black at death. A few died a lingering death, but never longer than twenty-four hours; if they were able to hold out for a day they had a fair chance to live. Those who lived generally lost their hair, hence the illness was called 'Head stripped bare' (*po'o-kole*)."²⁰ Kamakau added that this disease—he thought it was cholera—was brought to Oahu by foreign ships in 1804.²¹

John Papa Ii, writing at the same time as Kamakau, put the *okuu* in 1806, at least two years later than Kamehameha's illness, which Ii failed to identify.²²

In 1897 Thomas G. Thrum recalled "a well known old time resident of Kauai once speaking of it having been described to him by natives of his district as very much resembling the black plague. . . . It probably had its origin by contagion from China through the sandal wood trade then opening up between the two countries."²³

The most detailed description of the *okuu* was one published in 1935 by Arthur A. St. Maur Mouritz, a physician who had settled in Hawaii in 1883. This citationless account of "a mysterious malady which ravaged Hawaii in the year 1804, and named by the Hawaiian people the Ahulau Okuu" mentioned "intense pains in their bellies and cramps in their legs" and continued: ". . . thin discharges like sour starch water flowed frequently from the bowels; some vomited continuously; their faces and bodies became blue and cold like the dead, their eyes grew small and sank into the head . . ." Identifying this disease as malignant Asiatic Cholera, Mouritz asserted that it "caused 22,000 deaths on the island of Oahu alone," and speculated that it may have reached Hawaii in bilge water pumped from Krusenstern's ships into Honolulu Harbor.²⁴ Characteristically, Mouritz provided no clues to his sources for this wealth of detail.

In an untitled, undated and unpublished manuscript, Romanzo Adams, the pioneer Hawaiian demographer, attempted to estimate population and vital rates for this period. He explained: "I have credited Malo's estimate as not far from correct, but have estimated the loss a little lower than he did." In one draft, Adams showed a population decline of 112,000 between 1803 and 1804, based on a crude birth rate of 20 per 1,000 inhabitants and a crude death rate of 441. In another draft, Adams gave the net decline (between 1804 and 1805 this time) as 128,000, with a birth rate of 25 and death rate of 482.²⁵

Recent writers have continued to speculate

about this mystery. Kuykendall (1938) referred to the epidemic as the *mai okuu* and surmised that it may have been cholera or bubonic plague.²⁶ Hormann (1949) dubbed it "the vomiting sickness."²⁷ Taff (1949) mentioned the possibility that the *okuu* was dysentery, noted that "estimates of the dead were as high as one-eighth of the population," and concluded that "it was second only to a later epidemic in fatality."²⁸ Halford (1954) reported its date as 1805.²⁹ Daws (1968) wrote that the epidemic "was probably cholera or typhoid fever."³⁰

What is probably the most authoritative analysis of the *okuu* to date was offered by Dr. Walter B. Quisenberry, Director of Health for the State of Hawaii, after reading an earlier draft of this article:

I have had the doctors in the Communicable Disease Division and Epidemiology Branch review your paper and they also showed great interest in the historical aspect but were hard put to come to any definite conclusion as to the nature or size of the *okuu* epidemic.

The reference which you quote reflects considerable disagreement as to the size of the epidemic. This question probably will never be completely settled. However, from an epidemiologic and clinical point of view, the contradictions in the material do not seem to be so great that a fairly accurate "epidemiologic guess" cannot be made. The characteristics of the disease are sketchy but sufficient to describe the basic nature of the disease and to provide an interesting exercise in running down the clues as they are introduced and can be fitted together as one would a picture puzzle or a detective story. Considered together, the information available seems to permit the exclusion of all diseases except one with a fairly high probability of accuracy.

As described, the epidemic of 1803 was characterized by its explosive nature, therefore probably not vectorborne; by its high fatality rate with rapid (1-2 day) course; and by being a diarrheal, wasting disease without skin eruption. This would rule out most of the severe epidemic diseases, except cholera, which has been present in Asia continuously and was known to have reached California in the early 1800's.³¹

What conclusions can be drawn from this wide range of materials?

The literature reveals considerable disagreement. Historians differ on the Hawaiian name, diagnosis, origin, geographic extent, year, and death toll of the epidemic. The estimates of mortality—the primary concern of this paper—are especially divergent.

First-hand evidence is totally lacking. Lisiansky was visiting another island at the time and heard about the epidemic from others. Mariner and Iselin arrived two or three years too late to witness the disease directly. Tyerman and Bennet did not learn of it until 1822, and Malo's descriptions

first appeared after 1835. Five original accounts were initially reduced to writing in the 1860's. Few of these writers bothered to credit their sources, although many seemed to rely on native informants of advanced years.

These accounts grew appreciably in wealth of detail and degree of horror with the passing years. Early references to the epidemic were brief and subdued. After mid-century, however, descriptions were longer and more gruesome, and estimates of the death toll were as high as 175,000. In this respect stories of the *okuu* followed the pattern of accounts of Hawaiian battle mortality, which seemed to grow in bloodshed with every telling. Stokes has traced a number of these stories; the defenders of Oahu in 1795, for example, lost only 300 men according to contemporary sources, 3,000 in an 1854 account, and 10,000 by 1914.³² Evaluating statements that epidemic mortality carried off more than half of the population, Chamberlain made "due allowance for the hyperbolic manner in which the natives sometimes express themselves," and Kuykendall suspected "legendary exaggeration."³³

The failure of several persons who visited Hawaii during or soon after the *okuu* to make any reference to it may be especially significant. Kuykendall observed that "Shaler, who was at the islands in 1803 and 1805, makes no mention of the epidemic in his journal . . . , which he certainly would have done if the deaths had been as numerous as the native accounts indicate."³⁴ Cleveland, Von Langsdorff, Patterson, Delano, a "respectable American" living on Maui, and an unidentified sea captain, likewise omitted any reference to the disease in their otherwise detailed notes.³⁵

Some of the credence accorded to the higher death figures appears to have stemmed from the obvious disparity between King's well-publicized population estimates for 1779 and the numbers estimated by the missionaries in 1823. Captain King wrote that the Sandwich Islands had approximately 400,000 inhabitants (including 60,000 on Oahu) at the time of Cook's visit, but Ellis and Stewart found only about 140,000 (20,000 of them on Oahu) forty-four years later.³⁶ Such apparent decline was often explained by postulating heavy epidemic mortality. It is now evident, however, that King greatly overestimated the population of the Islands. What decline did take place after first contact can readily be attributed to other factors, such as famine, warfare, infanticide, and sharp reduction in fertility caused by venereal disease.

Early visitors similarly saw evidence of vast depopulation (and, inferentially, epidemic mortality) in the numerous deserted villages and fields that dotted the landscape.³⁷ They failed to recognize that these abandoned settlements resulted

more from migration than from mortality. One of the more perceptive visitors, William Shaler, wrote in 1805: "In the true spirit of despotism, it is well understood that no chief of the least consequence can reside any where but near the person of the monarch, and, as he migrates through his dominions, he draws after him a train more destructive than locusts. Everything is abandoned to follow the sovereign, and the country being deserted by all who have an interest in its cultivation and improvement of the lands, they are of course neglected."³⁸

The foregoing evidence makes it almost impossible to escape the conclusion that the *okuu* has been greatly exaggerated. If, as seems likely, the epidemic was limited to Oahu, the death toll was probably well under 15,000 (out of perhaps 35,000 or 40,000 on the Island at the time.) If only Kamehameha's troops suffered, the mortality was considerably less, certainly not over 5,000. Such death totals are still high by anyone's standards, but they hardly compare to some of the astronomical figures found in the literature.

One point remains: How does the *okuu* rank in mortality among other great Hawaiian epidemics?

Statistics are unfortunately lacking before 1848. One exception is the "catarrhs and fevers" which struck Oahu in November 1818; on December 1 Marin "calculated . . . that the deaths amount to 60 from the commencement of the disease."³⁹ Marin also noted "many deaths & many coughs" in May and June, 1824.⁴⁰ In 1825 Kotzebue reported that "an epidemic disease prevailed this year throughout the Sandwich Islands. It produced a great mortality, death generally following the attack within a few days."⁴¹ A year later, in 1826, "thousands died, especially in the country districts, of an epidemic of 'cough, congested lungs, and sore throat,'" according to Kamakau.⁴² A net population loss of 22,000 between 1832 and 1836 has been attributed to whooping cough, measles, or social disorganization, depending on the source.⁴³ Mumps caused the deaths of "great numbers" in 1839.⁴⁴

A series of epidemics swept the kingdom during the last four months of 1848. Measles and whooping cough struck almost simultaneously, followed by diarrhea and finally influenza. "Ten thousand would probably be a low estimate for 1848 and 1849, which those epidemics took away," reported *The Friend* (although the official total for all causes of death combined was only 12,263 during this two-year period).⁴⁵ Missionary doctors estimated epidemic mortality at "not less than one-tenth of the inhabitants." The death toll was especially high among infants (from whooping cough) and the aged.⁴⁶

The smallpox epidemics of 1853 caused be-

tween 5,000 and 6,000 deaths, according to a report by the Minister of Public Instruction, although the official tally was only 2,485 and estimates went as high as 15,000.⁴⁷

A number of less catastrophic epidemics struck Hawaii between 1853 and 1918. In 1857, according to Kamakau, "many died of an epidemic of colds, dull headache, sore throat, and deafness," although contemporary newspapers, describing the illness as "two-thirds influenza with an occasional touch of boohoo [dengue—Ed.] fever," found it to be "comparatively harmless."⁴⁸ "Coughing, chills, fever, vomiting, bleeding at the nose, giddiness, and general debility" brought death in 1866.⁴⁹ Scarlet fever was prevalent in 1870 and 1871, especially on Maui, where it caused "great mortality."⁵⁰ Smallpox returned in 1872 but killed only eleven.⁵¹ Whooping cough took the lives of 68 Honolulu residents during a two-year span ended in March 1880.⁵² Still another bout with smallpox took place early in 1881, when the disease killed 282.⁵³ Whooping cough returned late in 1888 and brought death to 104 in Honolulu alone.⁵⁴ Measles and dysentery resulted in "many deaths" (at least 26 of them in Honolulu) in 1889-1890.⁵⁵ Asiatic cholera took 64 lives in Honolulu in the summer and fall of 1895.⁵⁶ Sixty-one died from bubonic plague in Honolulu between December 12, 1899 and the end of April 1900.⁵⁷

Influenza raged in Hawaii from October 1918 to April 1920, reaching a peak in late February 1920. Deaths from this cause totalled 1,700, including 612 during the 12-month period ended June 30, 1919 and 1,088 during the following year.⁵⁸

Since 1920, only two epidemics causing noteworthy mortality have occurred in the Islands. Cerebrospinal meningitis was brought from the Orient in September 1928 and reached its peak in late March 1929; deaths during the fiscal year numbered 68.⁵⁹ An epidemic of measles began in September 1936 and peaked in January 1937; fatal cases eventually totalled 205.⁶⁰

The *okuu* thus appears to have been one of the three greatest epidemics in Hawaiian history, a distinction shared only by the outbreaks of 1848 and 1853. Mortality from the *okuu*, according to the evidence reviewed earlier, was probably less than 15,000 and perhaps under 5,000. The combination of diseases that struck the Islands during the last four months of 1848 reportedly killed about 10,000. Smallpox probably took 5,000 or 6,000 lives in 1853. The influenza epidemic of 1918-1920 was responsible for 1,700 deaths, thus ranking fourth. No estimate is possible for a number of epidemics prior to 1848, but some may have rivalled the 1918-1920 outbreak in fatalities.

The exact *okuu* death toll must forever remain a mystery. It seems clear, however, that it was by no means as cataclysmic as many historians have reported.

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*An ingenious test shows that women taking BCP's
have stickier platelets than women who aren't.*

Platelet Adhesiveness In Women Using Oral Contraceptives*

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MARY SUZUKI,‡ and MITSUO YOKOYAMA, M.D., Honolulu

● *The adhesiveness of platelets to a glass surface was statistically compared in ten women using oral contraceptive drugs and in a control group. Increased adhesiveness was noted in the contraceptive group after a two-minute exposure to the glass surface.*

THE PHENOMENON of platelet adhesion to various surfaces has attracted interest in recent years, and several theories have been advanced to explain it. Electron microscopic studies¹ suggest that platelet adhesion resembles phagocytosis. Curtis² has proposed that adhesion is due to net electrostatic attraction. Although *in vitro* studies show that platelets will adhere to many surfaces, including glass and latex, *in vivo* studies indicate that collagen is the only substance normally found in the vessel wall to which platelets will adhere.

Certain morphological and biochemical changes occur when platelets adhere to collagen. Both *in vivo* and *in vitro* studies³ show that platelets exposed to collagen swell and become degranulated. This is associated with the release of nucleotides, especially adenosine diphosphate (ADP), inducing aggregation of platelets to each other.

Various plasma constituents affect the sensitivity of the platelets to these agents. It has been found⁴ that an elevated concentration of free fatty acids in the blood is associated with hypercoagulability of blood resulting in thrombosis. Bolton⁵ reported that increase of platelet sensitivity to ADP was

associated with the appearance of an abnormal low-density lipoprotein in the plasma. In addition, Mustard⁶ reported that thrombogenesis was enhanced by giving epinephrine to swine. These results indicate that changes in the platelet environment, as well as in the platelet itself, are involved in thrombogenesis.

Due to recent reports⁷ of thromboembolic disease in women using oral contraceptive drugs, we have attempted to demonstrate differences in the platelet response to glass surfaces between women using such drugs and a control group.

MATERIALS AND METHODS

Blood samples were obtained from ten women between the ages of 20 and 35 taking oral contraceptives of the following types: Ovulen (ethynodiol diacetate with mestranol), Ortho-Novum (norethindrone with mestranol), C-Quens (mestranol, 80 mcg with chlormadinone acetate, 2 mg), Enovid E (norethynodrel 2.5 mg, mestranol 0.10 mg), Enovid 5 (norethynodrel 5 mg, mestranol 0.075 mg), and Enovid 10 (norethynodrel 9.85 mg, mestranol 0.15 mg). Only women taking contraceptives for five consecutive days or longer were included in this study. Thirty-eight nonpregnant women of the same age group were used as controls. Studies were performed during the intermenstrual period.

Platelet adhesiveness was measured using a modification of the method of Hellem.⁸ Two ml of blood was obtained by intravenous puncture using a plastic syringe, and diluted 1:9 with 3.8% trisodium citrate. A platelet count was performed on the precontact specimen using the method of Brecher, Schneiderman, and Cronkite.⁹ Then, the

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sample of blood was placed in a 10-ml beaker containing 75 4-mm-diameter glass beads. The beaker was then swirled at 250 rpm on an electric rotator. Portions of the blood sample were withdrawn at 2, 5, 7, and 10 minutes respectively, and platelet counts were performed on each. Each of these counts was then compared with that of the pre-contact state, the difference representing the number of platelets adhering to the glass surfaces. This number was expressed as a percentage of the pre-contact platelet count.

Other methods attempted including swirling the blood sample in a weighed amount of glass wool, and passing the blood sample through a glass wool column. These methods were unreliable due to the enhanced possibility of error in dilution and the unattainability of a constant flow rate through the column.

RESULTS

The percentage of platelets adhering to a glass surface upon contact is a measure of platelet adhesiveness. The platelet adhesiveness in both the test group and the control group increased with time (Fig. 1).

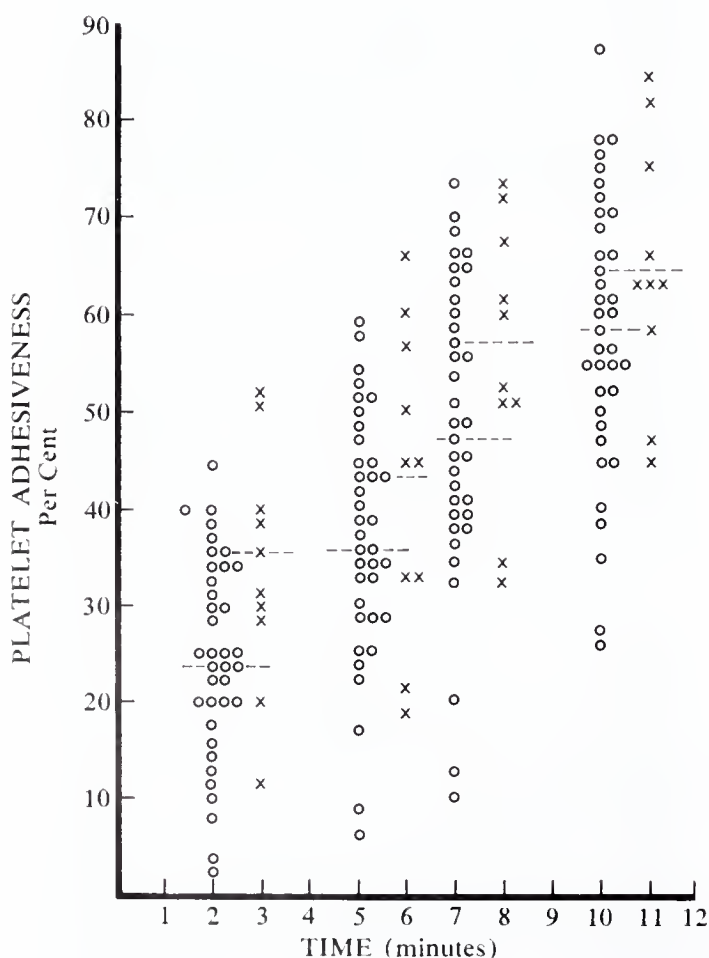


FIG. 1.—Platelet adhesiveness in contraceptive group (x) and control group (o).

TABLE 1.—Mean values of percent adhesiveness of 38 control women, 10 test women.

TIME	CONTROL	TEST	DIFFERENCE (2-1)	P
2 min.	24% ($\pm 10.7\%$)	35% ($\pm 10.1\%$)	11%	$p < 0.01$
5 min.	36% ($\pm 12.6\%$)	43% ($\pm 13.5\%$)	7%	N.S.*
7 min.	49% ($\pm 14.8\%$)	56% ($\pm 14.3\%$)	7%	N.S.
10 min.	59% ($\pm 15.0\%$)	65% ($\pm 12.6\%$)	6%	N.S.

* Not Significant
(extreme values excluded in calculation)

The mean (\pm standard deviation) values for the test and control groups are shown in Table 1. The mean two-minute percent adhesiveness value of the test group was 35% ($\pm 10.1\%$) while that of the control group was 24% ($\pm 10.7\%$). The difference was significant ($p < 0.01$). The values for the 5, 7, and 10 minute periods for the test group were 43% ($\pm 13.5\%$), 56% ($\pm 14.3\%$), and 65% ($\pm 12.8\%$), while for the control group the mean values were 36% ($\pm 12.6\%$), 49% ($\pm 14.8\%$), and 59% ($\pm 15.0\%$) period respectively. The difference between the respective means is not significant. In each case, however, the test group showed a higher adhesive tendency than the control group.

DISCUSSION

Changes in platelet adhesiveness and sensitivity have been reported in various disease conditions. Bennett¹⁰ reported an increase in platelet adhesiveness within a day following a surgical operation. Hampton¹¹ has shown that the electrophoretic mobility of the platelets of ischemic heart disease patients is increased over that of a control group.

Bolton¹² found that patients with ischemic heart disease and peripheral arterial diseases have platelets which are abnormally sensitive to adenosine diphosphate (ADP). This abnormal sensitivity can be found in the plasma of patients with arterial disease, and such plasma has two components. One is a low density lipoprotein, the active fraction of which is its lecithin. The second component is labile and appears in normal plasma as well. The labile component is considered to be an enzyme which converts the lecithin of the low density lipoprotein to lysolecithin; it appears that lysolecithin induces abnormal platelet sensitivity to ADP.

Yamakido¹³ has found that the platelets of patients with recent cerebrovascular accidents aggregate when incubated in smaller concentrations of ADP than a normal control group. This study is being extended to patients with recent myocardial infarction. In all of the above conditions, however, the platelet studies were conducted sec-

ondarily to the abnormal physiological conditions.

Measurement of the effect of ADP and noradrenaline on platelet electrophoretic mobility¹⁴ has revealed the following: (1) Following surgical operations and in acute illnesses, e.g., acute myocardial infarction, pulmonary embolism, pneumonia, influenza, etc., there is increased sensitivity to both ADP and noradrenaline. (2) In contrast, platelets from patients with chronic ischemic heart disease, peripheral vascular disease, cerebrovascular disease, diabetes, hypercholesterolemic states, show increased sensitivity to ADP but normal sensitivity to noradrenaline.

Wynn *et al*¹⁵ reported changes in the plasma system of women taking oral contraceptives, causing platelets' behavior to resemble that of platelets in patients with arterial disease. Bolton *et al*⁵ have shown that the maximum electrophoretic mobility of the platelets of women taking oral contraceptives occurs after incubation in a smaller concentration of ADP than those of a control group. The British Medical Research Council⁷ summarized the increased incidence of thromboembolic diseases among women taking oral contraceptives. In its study, it was found that in women of child-bearing age, there was a threefold increased risk of developing some type of phlebitis, approximately five cases per 1,000 women per year. Among 19 women with venous thrombosis or pulmonary embolism, 14 had been using oral contraceptives, which was true of only three out of 36 in the control group. This relationship suggests the possible value of studying platelets in altered physiological environments.

In the comparison of the oral contraceptive group and the control group, the relationship between platelet adhesiveness and the length of exposure to glass was observed. Both groups showed a general increase in adhesiveness over the ten-minute period. Only in the two-minute measurement, however, was there a significant variation ($p < 0.01$) of the means of the two groups, the oral contraceptive group showing an increased percent adhesiveness. The studies of Hellem⁸ would indicate that other factors, such as platelet aging, as well as platelet adhesiveness, are responsible for the general increase of the mean values. There was no indication of a corresponding increased normal platelet count among the test group. This would indicate that there was an increase in the absolute number of adhesive platelets as well as an increase in percent adhesiveness of the platelet population.

All methods of determining platelet adhesiveness by contact with glass have their shortcomings. Salzman¹⁶ had studied platelet adhesiveness in patients with Von Willebrand disease and found that their platelets are less sticky. His method has

been used by other investigators, with results not as consistent as those he reported. Results from use of glass wool fiber columns have been inconsistent. Perhaps a constant flow method in drawing blood through a glass bead column might produce more consistent results. The method used in this study was set up to see whether time was a factor in platelet adhesiveness. The 2-, 5-, 7-, and 10-minute samples were selected after a number of runs were made with one-minute-interval determinations up to 15 minutes. The selected times were felt to be representative. The beaker was gently rotated at 250 rpm to keep the sample from settling. Samples were taken at different depths and the platelet counts were fairly constant. Although platelet damage must be considered by this rotation, no obvious agitation was observed.

ACKNOWLEDGMENT

The authors are indebted to Dr. Michio Yamakido, Kuakini Medical Research Institute, for his suggestions and critical reviews throughout this study.

ADDENDUM

After this paper was completed for publication, an article by Jick H, Slone D, Vessey MP, and Shapiro S: Venous thromboembolic disease and ABO blood type. *Lancet* 1:539-542 (Mar.) 1969, appeared.

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The fire ant joins the mango as a rare but possible cause of an anaphylactic reaction. We should be aware of it.

Anaphylactic Reaction to Fire Ant

LT. COLONEL R. BRUCE HELMLY, MC, USA,* Honolulu

● *The fire ant or "red ant" is endemic in Hawaii and is able not only to inflict a painful sting in human skin, but also, as shown by this case, to produce an anaphylactic reaction. The patient was about 100 times more sensitive than normal to the commercial fire ant extract.*

ALTHOUGH systemic allergic reactions to bees and wasps are not uncommon in Hawaii, systemic allergy to ant sting is infrequently encountered and, indeed, it may not be generally appreciated by physicians that a species of fire ant is common here and may be responsible for anaphylaxis.

A 32-year-old man was stung on the foot by five small ants while at a beach near Barber's Point, Oahu. He immediately noticed intense itching of the foot and tearing of the eyes. Within ten minutes there was diffuse flushing and tightness in the throat, followed by hives and angioedema of the face. He was examined by a physician within 30 to 40 minutes after the stings, and wheezing was heard. Injections of diphenhydramine (Benadryl) and adrenalin arrested the reaction.

He recalled that one year previously, also while on a beach, he had been stung on the top of the foot near the toewebs by an unknown insect and suffered similar but milder symptoms which lasted about an hour without treatment, and he did not seek medical attention.

He had never been stung by bees to his knowledge. He had no other personal or family history of allergy. He was otherwise healthy.

Two weeks after the episode, skin testing was performed with a commercial extract of fire ant.[†] After preliminary scratch-testing was negative in dilute solutions, intradermal testing was carried out beginning at 1:2 billion dilution. At a 1:2,000 dilution (5 PNU per cc), a small response was obtained, which was larger at 50 PNU, and was markedly positive at 500 PNU per cc using standard intradermal testing techniques. On testing with mixed stinging insect antigen (honey bee, wasp, yellow jacket, and hornet), a small reaction at

500 PNU per cc was obtained, which is expected in normal individuals. Normal persons and persons being desensitized for allergy to other stinging insects showed questionable reactions to 500 PNU/cc and none to 50 PNU/cc of the fire ant extract. Skin testing with increasing concentrations of insect antigens after a small positive reaction is obtained is necessary in order to exclude nonspecific reactions due to the toxic properties of the venom of both bees and ants.

He returned to the beach where he had been bitten and directed the collection of the responsible ants. The Entomology Section, U. S. Army Hawaii, identified them as *Solenopsis geminata*, a species of fire ant related to, but different from, the ferocious mainland fire ant, *Solenopsis saevissima*.

Since the patient was leaving Hawaii for the Antarctic, he declined desensitization to fire ant extract.

DISCUSSION

In discussing this case with some other physicians, both civilian and military, it became evident that it is not widely appreciated by physicians that a type of fire ant is present in Hawaii. This has, in fact, been known since at least 1934,¹ but a review of the literature reveals no previously reported cases of fire ant allergy in Hawaii. Arnold stated in 1956² that the fire ant was present in Hawaii, but that he was unaware of any systemic reactions to it having occurred there.

The fire ant is an insect of the order Hymenoptera, which also includes other ants, wasps, yellow jackets, hornets, honey bees, and bumblebees. Ants, of course, do have a flying stage in their life cycle. The fire ant, unlike most other ants, does not simply "bite," but stings: i.e., injects a venom.² Although numerous studies have been carried out on the various antigens present in the other Hymenoptera, no studies were encountered in the literature on the immunology of fire ant antigens.

The venoms of Hymenoptera are known to contain substances resembling histamine, serotonin, acetylcholine, hyaluronidase, phospholipidase, proteinase, and an oxidase, in addition to other protein-like compounds of high toxicity.³ It is fortunate that the antigens responsible for systemic

* Chief, Allergy Service, Tripler General Hospital.

† Greer Company, 10,000 PNU per cc, original concentration.

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allergic reactions to the flying Hymenoptera (bees, wasps, etc.) are present in whole-body extracts,⁴ since this allows commercial production, at a reasonable cost, of the material for desensitization.

No controlled studies of the benefit of desensitization for systemic allergy to fire ant could be found.⁵ Desensitization therapy for the other Hymenoptera allergies has been found to be of definite benefit and it is reasonable to assume, though unproven, that desensitization to fire ant would be as effective.

Fire ant sting should be suspected when a person is stung by an ant which causes severe pain, or in any case of systemic reactions (hives, angioedema, wheezing, etc.) to ants or to unknown insects attacking the top of the feet or between the toes.

In Hawaii, the fire ant *Solenopsis geminata*, commonly called the "red ant," is quite small, about 2.5 mm in length, generally reddish or dark brown, and is generally found in dry areas, such as fields or leeward beaches. On casual inspection it is not very different from other species of ants found in grasses and homes, although it can easily be identified by entomologists. It prefers exposed localities devoid of sheltering vegetation, and in Hawaii generally does not build mounds, although small heaps of loose earth are often found about the top of a nest, sometimes in a lawn. Colonies in pineapple fields may have large, deep nests, and the ants are typically aggressive, tending to swarm over one quickly and sting repeatedly on

slight provocation. *S. geminata* is not generally found around homes in Hawaii.*

The diagnosis of systemic allergy to stinging insects should be made on the basis of the *history*. A negative skin test to dilute solutions does *not* exclude allergy.^{6, 7} The decision for desensitization should be based primarily on the history of hives, angioedema, wheezing, and other evidence of anaphylaxis.

From my experience with the flying Hymenoptera, I would recommend that patients with systemic allergy to fire ants be skin tested with very dilute solutions (beginning with 1:2 billion) and that desensitization be started with a concentration 1/10 or 1/100 of that causing a positive test, and continued for three years.⁶ Patients should wear foot covering and not sit in grassy areas, and should always possess an antihistamine, and adrenalin if possible.

* The cooperation of Mr. Bernard B. Sugerman in identifying the ants and in the description of their habitat is acknowledged and appreciated.

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COOPER HOSPITAL QUIZ

- (1) Ventricular arrhythmias are a major contributing factor or the cause of death after acute myocardial infarction. TRUE OR FALSE.
- (2) Ventricular arrhythmias respond so promptly to proper therapy that nothing is gained in using an antiarrhythmic agent routinely. TRUE OR FALSE.
- (3) For procainamide to be most effective it should be used to produce a plasma concentration of 4 to 6 mg per liter. TRUE OR FALSE.
- (4) There are no striking differences in the clinical findings of patients over 60 with aortic stenosis. (As compared to younger patients with aortic stenosis). However, the patient over 60 with aortic stenosis is not a candidate for heart surgery. TRUE OR FALSE.
- (5) Primary amebic meningoencephalitis does occur. It is invariably fatal despite treatment. TRUE OR FALSE.
- (6) Amebic meningoencephalitis may not be diagnosed because most pathologists seldom examine warm wet preparations of cerebrospinal fluid under high magnification. TRUE OR FALSE.
- (7) Salbutamol is a new beta-adrenergic receptor stimulant. It appears to be better tolerated in the asthmatic than isoproterenol; primarily because it has more bronchodilator effect and less cardiovascular effect. TRUE OR FALSE.
- (8) Papaverine in large doses appears to be toxic only after intravenous administration. TRUE OR FALSE.
- (9) The recently reported cases of hepatotoxicity due to papaverine showed mild jaundice and clearing of symptoms when the drug was stopped. TRUE OR FALSE.

Answers will begin on page 399.

*Vitamin supplements are seldom either needed
or useful, according to this study.*

Practical Aspects of Supplementation of Children's Diets in Honolulu

MYRTLE L. BROWN, Ph.D., *Honolulu*

● *The nutritional status of 281 two- and three-year-old children of low- and middle-income families was evaluated by dietary, biochemical, and clinical methods. In general, diets were reasonably adequate when compared with the NRC recommended allowances for all nutrients except calcium, iron, and ascorbic acid. Dietary intakes of middle-income children tended to be somewhat superior to those of children of low-income families for all nutrients except iron. Incidence of anemia was somewhat higher among low-income children. Few children's diets were supplemented with iron preparations; larger numbers, however, were taking vitamins. Analysis of diets of children who received supplements and those who did not suggested that the decision to supplement was an arbitrary judgment and was not related to need. Most of the children's diets could be improved by minor changes in the diet.*

THIS REPORT, which is one phase of a multifaceted study of diet and nourishment of two- and three-year-old children in Honolulu, is concerned primarily with the effect of vitamin and mineral supplementation upon dietary intake and nutritional status.

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Supported by U. S. Department of Agriculture Cooperative Agreement No. 12-14-100-8438 (62) from the Consumer and Food Economics Research Division and the Human Nutrition Research Division, Agricultural Research Service.

Associate Professor in Public Health, University of Hawaii, School of Public Health.

SAMPLE

The sample was randomly drawn from low- and middle-income families in five areas of the city of Honolulu. Low-income families were those whose size would qualify them for the Food Stamp Program. Low and middle incomes represented distinctly different income levels. For example, for a family of three, low income was designated as \$180-\$210 per month and middle income range was \$415-\$665. The total sample comprised 281 children (of 249 mothers), 147 from low-income families and 134 from middle-income.

Dietary data were obtained from the mother by trained interviewers who conducted the interviews in the home. Dietary intake for a three-day period including one weekend day was obtained by mother's recall of the child's food intake for the day prior to interview and by record kept by the mother for the remainder of the three-day period.

The majority of the children were subsequently examined in a clinic by a pediatrician within two weeks of the diet record period. In no case was the intervening period greater than one month. Blood collected by finger prick was analyzed for hemoglobin, hematocrit, and plasma amino acid ratio.¹ A single random urine sample was collected for determination of creatinine,² urea nitrogen,³ thiamine, and N-methyl nicotinamide.⁴

RESULTS

Early in the study, it became apparent that urinary excretion of thiamine and N-methyl nicotinamide (a metabolite of niacin) was far in excess

TABLE 1.—*Mean intakes from food and from food with vitamin supplement by age of child and income of family.*

	NO. OF CHILDREN	EN- ERGY Kcal	PRO- TEIN gm	FAT gm	CHO gm	CAL- CIUM mg	IRON mg	VITA- MIN A I.U.	THIA- MINE mg	RIBO- FLAVIN mg	NIA- CIN mg	ASCORBIC ACID mg
TWO-YEAR-OLDS:												
<i>Low Income</i>												
Unsupplemented	43	1140	45.5	42.9	139.0	489.2	6.0	2150	0.57	1.07	7.3	25
Supplemented— Food only	22	1276	48.7	51.5	156.1	548.8	6.8	2780	0.61	1.33	7.3	31
Supplemented— Food + Suppl.	22	1276	48.7	51.5	156.1	548.8	11.8	6280	2.46	3.27	22.4	70
<i>Middle Income</i>												
Unsupplemented	14	1581	50.0	55.7	223.1	575.5	7.2	3280	0.70	1.34	8.0	42
Supplemented— Food only	46	1220	47.7	47.6	149.2	579.8	5.8	2810	0.63	1.33	7.1	44
Supplemented— Food + Suppl.	46	1220	47.7	47.6	149.2	579.8	7.1	6290	1.88	2.71	17.8	46
NRC ALLOWANCES		1250	25			800	15	2000	0.6	0.7	6	40
THREE-YEAR-OLDS:												
<i>Low Income</i>												
Unsupplemented	54	1345	48.5	50.1	171.7	517.5	7.4	2610	0.66	1.18	8.4	32
Supplemented— Food only	28	1467	54.1	57.4	186.2	528.2	8.1	3030	0.71	1.28	9.2	39
Supplemented— Food + Suppl.	28	1467	54.1	57.4	186.2	528.2	14.9	5490	2.58	3.52	27.1	51
<i>Middle Income</i>												
Unsupplemented	17	1415	53.0	57.0	175.8	521.2	7.2	3310	0.65	1.32	7.9	44
Supplemented— Food only	57	1339	50.4	49.2	166.8	491.5	6.7	3090	0.66	1.38	7.9	42
Supplemented— Food + Suppl.	57	1339	50.4	49.2	166.8	491.5	8.4	6350	1.93	2.88	19.5	52
NRC ALLOWANCES		1400	30			800	10	2500	0.7	0.8	8	40

of levels normally excreted by well nourished young children. Because unusually high excretion levels were observed primarily among children taking vitamin supplements, mean nutrient intakes presented in Table 1 indicate intakes for children whose diets were unsupplemented and, for those taking supplements, from food alone and from food plus supplement.

Recommended daily allowances of nutrients proposed by the Food and Nutrition Board of the National Research Council⁵ for children two and three years of age also are shown in Table 1.

Mean intakes from food alone met or exceeded the allowances for all but three nutrients. Calcium intakes were below the recommended allowance for all groups but were well above two-thirds of it, which is generally considered to be reasonably adequate. Mean intake for ascorbic acid was below the recommended allowance for two-year-old children of low-income families, but was above two-thirds the recommendation for three-year-olds of the low-income group and for the middle-

income children of both age groups.

Iron intakes tended to be lower, for all groups, than the recommended allowances. However, intakes of three-year-old children compared more favorably with recommendations than those of two-year-old children.

Because variation was great, as indicated by high standard deviations, individual diets were rated according to whether they met or exceeded the recommended allowances, met two-thirds of the allowances or were below two-thirds the allowance. These data are shown in Figure 1 for all children. Over 90% of the children had diets that met or exceeded the allowances for protein, and all but one consumed at least two-thirds of the allowance for protein. Calcium, iron, and ascorbic acid were the nutrients for which fewer of the children's diets approached two-thirds of the recommended intake. In general, more children of the middle-income families met or exceeded two-thirds the recommended allowance than did low-income children.

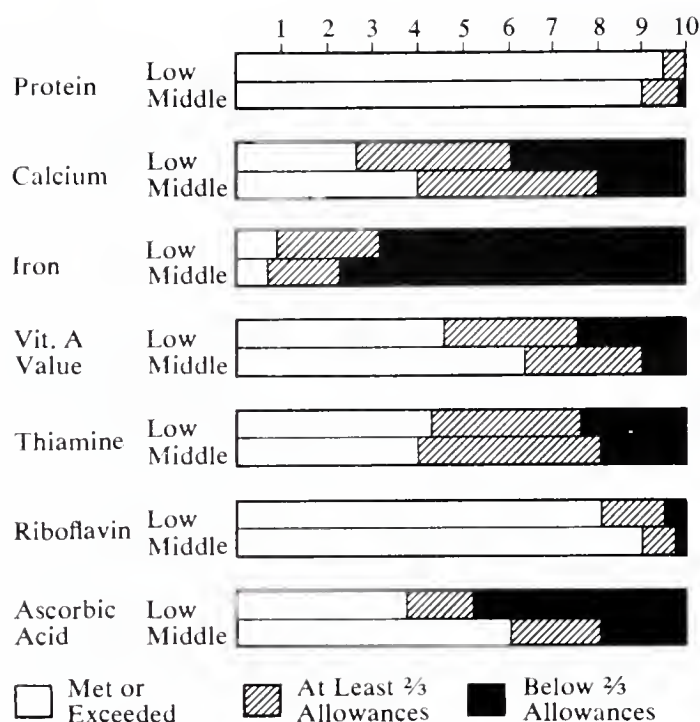


FIG. 1.—Diets providing allowances and less than 2/3 allowances.

Supplementation. Of the 147 low-income children, 57 or 39% were taking a vitamin preparation; 104 or 78% of the middle-income group were taking a supplement. Supplements had been prescribed by a physician for 35% of low-income

children as compared with 70% of middle-income children who were taking supplements. For other children, the decision to supplement was made by the mother. As shown in Table 2, supplementation increased mean vitamin intakes by two to four times recommended levels except for ascorbic acid, which somewhat fewer children were taking.

Only 44 children were taking iron preparations, 27 low-income children and 17 of middle-income. Supplementation of these children's diets increased iron intake on the average to meet or exceed the recommended level. Total iron intakes of these children ranged from 14 to 52 mg per day.

Clinical examination. Clinical examination revealed no overt signs of nutritional deficiency. The most significant findings directly related to nutritional status were pallor and poor muscle tone. These conditions were more frequently noted among low-income children than among children of middle-income families and were positively related to incidence of anemia.

Biochemical evaluation. Results of biochemical determinations are shown in Table 3. Vitamin excretions were high for both low-income and middle-income children whether or not the diet was supplemented by vitamin preparations. Plasma amino acid ratio and urea nitrogen/creatinine ratio (related to protein nutritional status) indicated some degree of protein malnutrition among 12-20% of

TABLE 2.—Mean intakes from food and from food with vitamin supplement by age of child and income of family (% of recommended allowances).

	NO. OF CHILDREN	VITAMIN A	THIAMINE	RIBOFLAVIN	NIACIN*	ASCORBIC ACID
% of Recommended Allowances						
TWO-YEAR-OLDS:						
<i>Low Income</i>						
Unsupplemented	43	108	95	153	122	63
Supplemented—Food only	22	131	101	190	122	78
Supplemented—Food + Suppl.	22	314	410	467	373	175
<i>Middle Income</i>						
Unsupplemented	14	164	117	191	133	105
Supplemented—Food only	46	141	105	190	118	110
Supplemented—Food + Suppl.	46	315	313	387	297	115
THREE-YEAR-OLDS:						
<i>Low Income</i>						
Unsupplemented	54	104	94	148	105	80
Supplemented—Food only	28	121	101	160	115	98
Supplemented—Food + Suppl.	28	220	369	440	339	128
<i>Middle Income</i>						
Unsupplemented	16	132	93	165	99	110
Supplemented—Food only	57	124	94	173	99	105
Supplemented—Food + Suppl.	57	254	276	360	244	130

* Recommended allowances in mg equivalents.

TABLE 3.—Rating of biochemical measurements by income and supplementation.

TEST	TOTAL SAMPLE (281)	LOW INCOME		MIDDLE INCOME	
		Unsupple- mented (90)	Supple- mented (56)	Supple- mented (29)	Supple- mented (103)
	% of Group	% of Group	% of Group	% of Group	% of Group
Hemoglobin (gm %)					
High (12.5 or above)	35	24	32	33	46
Acceptable (11-12.4)	51	58	49	57	44
Low (10-10.9)	10	13	14	....	7
Deficient (9.9 or less)	4	4	5	7	3
Hematocrit (%)					
High (37 or above)	49	42	40	40	62
Acceptable (34.0-36.9)	44	48	47	53	35
Low (30-33.9)	7	8	12	7	4
Deficient (29 or less)	< 1	2	....	....	....
Plasma amino acid ratio					
High (1.5 or below)	55	47	61	63	55
Acceptable (1.6-1.9)	33	34	32	27	35
Low (2.0-2.9)	12	20	7	10	10
Deficient (3.0 and above)	0	....	....	....	....
Urea nitrogen/creatinine ratio					
High (15 or above)	40	29	46	53	43
Acceptable (10-14.9)	39	44	37	30	38
Low (7-9.9)	14	19	14	7	13
Deficient (6.9 or below)	6	6	2	10	6
Thiamine/creatinine (mcg/gm)					
High (600 or above)	67	50	72	67	79
Acceptable (176-599)	31	48	21	30	21
Low (120-175)	2	2	5	3	....
Deficient (119 or less)	0	....	....	....	....
Niacin/creatinine ratio					
High (4.3 or above)	98	98	96	100	100
Acceptable (1.6-4.29)	1	2	2	....	....
Low (0.5-1.59)	< 1	....	....	....	< 1
Deficient (0.49 or less)	0	....	....	....	....

the study group. Approximately 15% of the children had hemoglobin levels below 11 gm%; 4% had hemoglobin levels below 10 gm%. The incidence of low hemoglobin levels was somewhat higher among low-income children than among those of middle-income families.

DISCUSSION

The recommended allowances were first published by the Food and Nutrition Board of the National Research Council in 1941.⁶ These were revised in 1943 and have been revised every five years since this date as new information became available. The allowances are based on *present knowledge* of human nutrient requirements (and therefore are subject to change) and include a margin of safety to cover individual variation and minor stresses. As such, the allowances are presumed to be high enough to cover needs of nearly all persons in the population. If allowances are met, it is assumed that the diet is adequate, and

because the allowances represent a fairly high level of nutrient intake, individual diets are not necessarily inadequate if the allowances are not fully met. At least two-thirds of the allowances is generally considered to be a satisfactory intake.

In the presence of an adequate dietary intake, the need for vitamin supplementation is questionable.⁷ For most persons, supplementation is required only when the individual cannot or will not eat an adequate diet, or when the individual is exposed to various stresses such as infections or trauma in which nutrient needs may be increased.⁷ Under usual conditions, the decision as to when to supplement and when not to supplement should be based upon clear understanding of the recommended allowances and the evaluation of individual nutrient intake.

The results of this study suggest that among this sample, the decision to supplement was not based upon need, but appeared to be an arbitrary

decision by the physician or very often, the parent. The most obvious need was for iron; yet only 44 children were taking iron supplements.

The present recommended allowance for iron is clearly higher than can be obtained from food alone, and the wisdom of setting an allowance so high can be questioned. The present allowance for two-year-old children is twice the 1963 recommendation of 7 mg, and the allowance for children three years old was increased from 8 mg to 10 mg in the 1968 revision. These allowances reflect, in part, a concern over the high incidence of iron deficiency anemia among young children as shown in recent surveys.^{8, 9} It has been suggested quite seriously that the present dilemma of iron deficiency anemia can be traced to the modern "clean" food supply, uncontaminated by iron-rich dirt or iron cooking utensils that enriched the diet of our ancestors.¹⁰ Whether the increase in iron allowances now recommended is justified remains to be seen. However, it is worth noting that almost half of the children's diets were inadequate in iron even when judged by the more conservative estimates of the 1963 revision of the recommended allowances. The low-iron diets of these children clearly are not merely the reflection of the increase in the recommendation.

The other nutrients most lacking in these children's diets were calcium, ascorbic acid, and to a lesser extent, vitamin A. These nutrients are often reported to be lacking in the American diet. It is possible, however, that recommendations for these three nutrients may be overestimated to some extent; thus, nutritional status may not be as poor as might be concluded from comparison with the recommended allowances. Calcium and vitamin A requirements are difficult to assess by present methods^{11, 12} and the desirable dietary level of ascorbic acid remains controversial.¹³ The allowances for ascorbic acid proposed by the Canadian Nutrition Council and the British Medical Council, for example, are considerably lower than the American standard.¹³ Clearly, however, intakes of these three nutrients could be increased by fairly minor adjustments of food intake from sources within the budget of families with limited financial resources.

The nutrients most commonly provided by supplements were the B vitamins: thiamine, riboflavin, and niacin. These nutrients were those for

which there was least need for supplementation as indicated by dietary and biochemical data.

We cannot adequately account for the poor showing of many of these children in terms of biochemical measurements of protein status. Reported protein intakes were uniformly high. Protein nutrition, however, is adversely affected by infection.¹⁴ Although our data do not indicate a relationship between history of infectious episodes and protein nutritional status, the possibility of undetected infections or infestations cannot be discounted.

The results of this study indicated that many children taking supplements have no real need for supplementation. Further, a fair number of children whose diets are deficient in one or more nutrients could benefit from limited supplementation or preferably from improvement in the diet. For most of the children included in this study, very minor changes in food intake could result in distinct improvements in nutrient adequacy. When supplementation is considered necessary, levels which bring nutrient intakes up to or just above the recommended allowances should be sufficient.⁷

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Japanese preschool children average only an inch shorter and less than two pounds lighter than part-Hawaiian children!

Growth Measures of a Selected Group of Preschool Children in Honolulu*

DORIS S. SMITH, M.S., and MYRTLE L. BROWN, Ph.D.,† Honolulu

● *Weight, standing height, total recumbent length, crown to buttocks recumbent length, and mid-upper arm circumference were recorded on 281 preschool children in Honolulu. On all five measurements three-year-olds were significantly larger and heavier than two-year-olds. Boys in each age category were significantly heavier than girls and were significantly longer on measures of total body length. Japanese children were significantly shorter than part-Hawaiian children on standing height and total recumbent length. No statistically significant differences were observed on these body measurements between low- and middle-income groups.*

IN THE ASSESSMENT of nutritional status, physical growth has long been an important criterion.¹ Although many measurements such as height, weight, and bone age singly or in combination, have been used, height or body length is considered to be the best measure of growth in children.² The present report is concerned with growth patterns, determined from an analysis of five body measurements, as part of a nutritional survey of 281 two- and three-year-old healthy preschool children which was conducted in the city of Honolulu between November 1966 and June 1967.

SAMPLE AND METHODS

Low- and middle-income families were contacted in areas adjacent to the University of Hawaii and in two housing projects. Low-income families were those that qualified for the Federal Food Stamp Program; for a family of four persons, the maximum income level was \$250 per

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TABLE 1.—Ethnic, sex, and age distribution of sample.

RACIAL GROUP ^a	BOYS Age (Months)				GIRLS Age (Months)			
	24-29	30-35	36-41	42-48	24-29	30-35	36-41	42-48
Part-Hawaiian	10	13	17	17	8	16	19	18
Japanese	5	8	5	14	7	8	8	6
Caucasian	3	2	4	1	0	1	3	2
"Other"	12	16	9	9	4	12	11	13
TOTAL	30	39	35	41	19	37	41	39

^a Determined from interview responses to parental ethnic backgrounds.

TABLE 2.—Means of anthropometric measurements by age category.^a

	TWO-YEAR-OLDS			THREE-YEAR-OLDS		
	<i>N</i>	<i>Means</i>	<i>S.D.</i>	<i>N</i>	<i>Means</i>	<i>S.D.</i>
Weight (lb)	125	29.25 [†]	3.84	156	34.12 [†]	4.79
Standing height (in)	122	35.00 [†]	1.52	154	38.19 [†]	1.77
Total recumbent length (in)	124	35.57 [†]	1.58	156	38.80 [†]	1.77
Crown-buttocks length (in)	124	21.74 [†]	1.09	156	22.99 [†]	1.41
Mid-upper arm circumference (cm)	125	16.27 [†]	1.30	156	16.95 [†]	1.46

^a Five children were not cooperative in the measuring of standing height; one child refused to lie down for the measuring of recumbent length.

[†] Significant at 1% level.

month. For the same family size, the middle-income range was \$500 to \$750 monthly.

Anthropometric measurements were made as one phase of the survey. Standard techniques were used in a clinical setting. All height and weight measurements were taken with the subjects bare-foot and wearing lightweight clothing. No corrections were made for weight of clothing. The right upper arm circumference was measured midway between the tip of the acromial process of the scapula and the tip of the elbow.

The ethnic, sex, and age distributions of the sample are given in Table 1. The "other" group, although perhaps typical of the Islands, is not a meaningful ethnic grouping because it includes pure Filipinos, Chinese, Koreans, Samoans, and Puerto Ricans as well as non-Hawaiian mixtures. Of the total sample, only the Japanese and part-Hawaiian subsamples are large enough for meaningful statistical comparison.

RESULTS AND DISCUSSION

Data on body measurements for all two- and three-year-olds are given in Table 2. The significance of differences was tested by use of the multiple regression technique, which permits statistical control of variables in nonhomogeneous samples. As was to be expected, differences between age categories in anthropometric measure-

ments reflecting growth were highly significant ($p = .01$).

Table 3 provides a further breakdown by sex categories. Between boys and girls at both age levels, there were significant differences ($p = .05$) in weight and length. These data support the continued use of separate height and weight standards for boys and girls. The differences between sexes for crown to buttocks (trunk) length and mid-upper arm circumference, however, were not statistically significant. This would suggest that the body length differences between sexes were primarily due to differences in leg length.

Ethnic comparisons between the Japanese and part-Hawaiian children are given in Table 4. Part-Hawaiians were slightly older than the other children, but average age differences were not statistically significant by straight analysis of variance. Since growth is positively age-related, however, this difference, as well as existing sex differences, were taken into consideration when the measurement means of ethnic groupings were compared using the multiple regression technique. Statistically significant differences ($p = .05$) were found only in measures of body length. These groups were not significantly different in trunk length. Therefore, body length differences between Japanese and part-Hawaiian actually represent differences in leg length.

TABLE 3.—Means of anthropometric measurements of two- and three-year-old girls and boys.

	TWO-YEAR-OLDS				THREE-YEAR-OLDS			
	<i>Girls</i>		<i>Boys</i>		<i>Girls</i>		<i>Boys</i>	
	<i>No. Cases = 56^a</i>		<i>No. Cases = 69^b</i>		<i>No. Cases = 80^a</i>		<i>No. Cases = 76^a</i>	
	<i>Means</i>	<i>S.D.</i>	<i>Means</i>	<i>S.D.</i>	<i>Means</i>	<i>S.D.</i>	<i>Means</i>	<i>S.D.</i>
Weight (lb)	28.68 ^{c*}	3.81	29.72 ^{c*}	3.83	33.48 ^{f*}	4.88	34.79 ^{f*}	4.63
Standing height (in)	34.78 ^{d*}	1.43	35.19 ^{d*}	1.58	37.92 ^{g*}	1.90	38.47 ^{g*}	1.58
Total recumbent length (in)	35.34 ^{e*}	1.44	35.75 ^{e*}	1.67	38.51 ^{h*}	1.86	39.11 ^{h*}	1.62
Crown-buttocks rec. length (in)	21.65	1.11	21.82	1.08	22.84	1.09	23.15	1.67
Mid-upper arm circumference (cm)	16.19	1.31	16.33	1.30	16.94	1.51	16.96	1.40

^a In height category, number cases = N-1.

^b In height category, number cases = N-2; in Total and Crown-buttocks recumbent lengths, number cases = N-1.

^{c-h*} Letter-pairs are significantly different at the 5% level.

TABLE 4.—Means of anthropometric measurements by ethnic group.

	JAPANESE		PART-HAWAIIAN	
	No. Cases = 61 ^a		No. Cases = 118 ^b	
	Means	S.D.	Means	S.D.
Age (months)	36.59	7.28	37.30	6.51
Weight (lb)	31.09	5.02	32.82	4.98
Standing height (in)	36.29*	2.17	37.23*	2.35
Total recumbent length (in)	37.01*	2.26	37.75*	2.35
Crown-buttocks recumbent length (in)	22.24	1.14	22.57	1.24
Mid-upper arm circumference (cm)	16.51	1.48	16.89	1.38

^a In height category, number cases = N-1.

^b In height category, number cases = N-3; in total and crown-buttocks recumbent lengths, number cases = N-1.

* Significant at 5% level.

There were no significant anthropometric differences between low- and middle-income groups. It appears, therefore, that the nutritional status of these two groups was comparable in this respect. In fact, the middle-income children were slightly shorter and weighed somewhat less than those in the low-income group. This was probably due to the large concentration (60 cases) of Japanese children in the middle-income group. Both income levels studied, however, were relatively low according to the cost of living in Hawaii and may not be characteristic of upper-income levels in the State. The relationships between children from upper middle or high-income families and low- or lower middle-income families have not been explored.

Woodruff, in an analysis of extensive ICNND data on children, has suggested that "infants and preschool children in most areas of the world have growth characteristics that are nearly the same under optimal environmental conditions."³

From the additional diagnostic procedures utilized in this survey,⁴ however, neither malnutrition nor the presence of infection would seem to explain the short stature of girls in relation to boys nor of Japanese as compared to part-Hawaiian children. These data suggest that hereditary factors are important determinants of growth even in relatively well nourished populations. Further study is needed, however, to fully elucidate the relationships between heredity and environment (including nutrition) as they affect growth patterns in Hawaii.

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The President's Page

This is election year. Nearly all important candidates of the national, state, and county level will be on the ballot. Now, health care is one of the nation's greatest political issues. Join the party of your choice!

Support qualified candidates with contributions to their campaigns and work on the precinct level. I am sure we have all learned by now the penalty of not participating.

George H. Mills M.D.

Rubella Vaccine for Adolescents and Young Adults

Rubella vaccine effectively stimulates production of antirubella antibodies and presumably induces immunity to wild rubella virus. Its use for mass immunization has been officially restricted to prepubertal children, in order to minimize the possibility that it will produce arthralgia or arthritis (commoner in older persons) or damage a fetus. It is not known that this could happen, but it is believed to be possible.

This leaves a large group of susceptible persons unprotected, except by reduction of the size of the pool of susceptible individuals to whom they might be exposed.

The risk of fetal damage could be dealt with by care to avoid pregnancy before, or for three months after, the vaccine is given. For maximum safety the occasional unintended pregnancy occurring after the vaccination should probably be interrupted. The risk of transient arthralgia or arthritis is very low with the Cendehill strain of

vaccine and could well be accepted.

The need of such protection in Hawaii is very great. Halstead found among 61 adolescent girls that only 16 (about 26%) had an antibody titer of 1:10 or more. My own study of 192 girls between 11 and 21 years old showed that only 67 (32%) had a titer of 1:16 or over. Only 50% of girls with a definite history of rubella have antibody titers at any level!

Two-thirds of young women are susceptible to rubella, and a history of it is not reassuring. The vaccine is safe, reliable, and need be withheld only from patients who are, or may become pregnant. The risk of withholding the vaccine altogether from this group of young women seems to me far greater than the risk of giving it to them. I believe they should be vaccinated against rubella if it seems likely that they will not become pregnant for three months.

JOHN R. STEPHENSON, M.D.

Sex

The role of the physician changes from time to time and is dependent upon many variables. We are in a most unique position, for although our job is to relieve suffering and stave off death, we can at best only temporize, since all of our patients are going to die someday of something. We are one of the few callings who are in business to do ourselves out of business. Our greatest accomplishments have really been in the field of prevention, of keeping a disease, a disability, or a dysfunction, from occurring in the first place. It seems odd, then, that we, the preventers, the healers, would do so little about a preventable phenomenon which kills about 60,000 men, women, and children a year, and injures about 4.5 million.

What really is our responsibility and what are we doing about it? It would appear that our re-

sponsibility is great as we see the horrible results and know that practically all of these occurrences are preventable. Unfortunately, we do not seem to be doing too much about seeing to it that they do not take place.

Modern Medicine published a series of articles this spring about "The Physicians' Role in Highway Safety" and the Travelers Insurance companies have just sent out a booklet called "Was It Sudden?" They both point out ways we can help to reduce the accident rate with its concomitant pain and anguish. They suggest that simply to blame the car, the driver, alcohol, poor roads, or any one single cause is far from a scientific approach. The causes of accidents are many and work in a "system," or chain reaction, to cause a tragic or happy ending to a driving experience. There is a car in more or less good condition, there is you, tired, awake, worried or relaxed, on

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a road well-lighted or dark, wet or dry, and then add or take away any one of another thousand or more factors, and you may have some leads as to the causes of accidents.

What then can you and I do about applying good scientific methods to accident prevention? Some of the suggestions we can follow to help prevent accidents ourselves include always, and in all ways, driving defensively, maintaining our cars in the best possible shape, and insisting on owning all optional safety devices, including the proper tires at the proper inflation for your car. Limit your driving when tired, emotionally upset or drinking. Adjust your driving and speed to current conditions of highway, weather, traffic or other conditions. Don't rush, keep your temper, and personally, in your own community, support better law enforcement, highway improvement, driver education in the schools and improved driver licensing. Be firm about your patient's medical disability which should keep him or her from driving a car.

Now how can we help prevent injury in the case of the so-called "second collision," that is, the passenger colliding with the inside of the car? First and foremost, *use* the seat belt and shoulder harness. Insist upon buying that car and driving that car with the greatest number of safety features, such as padded dash, collapsible steering wheel and head supports, and always remember,

the higher the speed, the greater the severity of the accident.

There are misconceptions in the minds of some people which we must help put aright. For example, some have suggested that a seat belt would prove fatal in case of fire or submerging. The facts are that the chances of survival are greatly increased with the use of the seat belt as the passenger has been protected from the second collision and is, therefore, much more likely to be conscious and able to escape. In every discussion of safety, there is usually one person who knows of someone who was thrown out of a car and suffered only minimal injuries. For every one of those we can show you 10 whose lives were saved by being belted in. And so on and on with feeble excuses not to face the obvious fact that you and your family can be killed, or maimed, in your own car today. If you carry insurance on your car for fear it might be damaged, take out some safety insurance with yourself, for fear you and yours might be damaged. There is a shortage of doctors. Please don't be afraid to be afraid.

Oh, yes, if you have wondered why this editorial was entitled "Sex," be honest, now—would you have read it at all if it had been called "Automotive Safety?"

WILLIAM K. KELLER, M.D.
Chairman, KMA Committee
on Highway Safety

Aloha, Lee McCaslin!

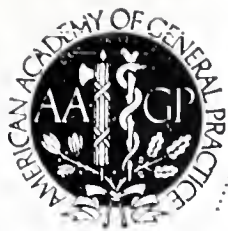
Lee McCaslin's name first appeared on the masthead of the HAWAII MEDICAL JOURNAL in the July-August issue of 1956, replacing that of Edith Bennett, our managing editor for the preceding 12 years. Webster Boyden was our new president, and we had just wrapped up the celebration of the centennial of the Association's incorporation. The JOURNAL was 15 years old.

This issue of the JOURNAL is the first one that does not carry her name on the masthead. She has resigned her position as executive secretary of the Hawaii Medical Association, and the JOURNAL has lost her services as managing editor.

We will miss her sorely. Her talent for spotting editorial inconsistencies and discrepancies between

text and tables, as well as a few overlooked solecisms in manuscripts—which she always reviewed at the last minute to impart that final polish—will not be replaceable in our time, we fear. Mrs. Dewaine E. (Marilyn) Wall has taken on the job of makeup of the magazine, preparing the "dummy" from which the printer works, and hopefully may become the new managing editor before long.

Meantime, we wish Lee all success in her new venture, and congratulate the clients of Island Homes on having so honest, perceptive, forthright, and charming a realtor to steer them aright. Aloha ka'ua, Lee! ■



Hawaii Academy of General Practice

... THE ANNUAL PHYSICAL

Any individual, lay or professional, who would decry the annual physical examination would be looked upon as a kook, and against motherhood.

In fact, so sacred is this old cow, that nearly all the individuals currently pushing medical health care plans in the halls of Congress are devising mechanisms whereby such periodic physical examinations **MUST** be a part of future national health programs.

Nevertheless, this is the ultimate in medico-legislative harassment!

Lady applicant! If you want this Federal job, you will not only be required to reveal your extra-marital relationships, your past and present memberships in subversive organizations, and your leanings towards homosexuality, but, unless you show me a recent certification of your VDRL, and now a Pap smear clearance, Uncle Sam cannot hire you. Go get your annual physical!

Let us focus on a specific example of how impractical such a plan can be.

A retirement home offers total medical care for a set monthly stipend. Naturally, it requires an applicant to undergo a medical evaluation. Just as an insurance company needs to know the "risk," so does this plan that includes total medical coverage need to know, and exclude from such coverage, pre-existing medical conditions. The more thorough this "entrance evaluation," the lower will be the financial risk to this institution. It is quite logical, therefore, that the Home employ a physician to serve its interests.

Now! For such an institution to offer as a part of the "benefits" an annual physical examination, is to defeat its actuarially calculated sound program, in which it gambles that the accepted Resident will have paid in **MORE**, in monthly fees, than it has cost to care for him during his life expectancy. To offer, at its own expense, to search actively for possible hidden correctibles or for treatable ailments in its residents, would be, for that institution, a foolish thing indeed.

It is true that to treat a cold properly from the very first day may prevent an expensive pneumonia later. However, this is an axiom pertaining

to a medical happening. The availability to the patient of total medical care, costing him nothing out-of-pocket, makes for just this sort of laudable early visitation to the doctor; in fact, nearly all health care plans necessarily incorporate a brake—a first visit deductible, or a co-insurance fee.

To encourage a well person, on the other hand, to submit to a disease hunt, can open a veritable Pandora's box.

Some people absolutely do **NOT** want to discover anything physically wrong with themselves. More power to them! This is and should remain their prerogative, but it is also ours, as physicians, to urge them, gently, to get their annual physicals. The objectionable thing is to make it mandatory—except for obtaining insurance, licenses, jobs, etc.

Other people might well pose problems as to the limits of "annual physicals" and might insist that such an examination should include a hundred to a thousand dollars' worth of tests. No medical plan—no dispenser of benefits—could withstand that kind of loading. Although corporations, for example, may have a logical stake in keeping a highly-trained supervisor "well" by thus forestalling his disability, no matter what the cost, this is not the same as the self-interest of an insurance program or medical plan. A "free" annual physical, then, is an invitation to an open-endedness of health care costs.

A periodic health evaluation is something each individual owes to himself; therefore, it should be at his own expense, and the extent of it should be governed by a private contract between him who wants it and him who does it.

As physicians, it is our duty to educate people towards self-care, pointing out the advantages of early, pre-symptom management, particularly in heart disease, diabetes, and cancer—and most particularly in the care and upbringing of growing children. To include a compulsory periodic physical, however, in prepaid or tax-paid socio-medico-economic schemes, is not wise.

The **AVAILABILITY** of top-quality health care is everyone's right; health itself is **NOT** a right. It is privilege one must earn for oneself.

J. I. FREDERICK REPPUN, M.D. ■

Your **Legislative Committee** has been busy, busy, busy—for the legislature has been in session—lots of long, special meetings. The big thing, of course, was the abortion bill. The poll of the members showed that a clear majority of HMA members favored repeal, so your HMA gave support to the bill which made abortions legal in Hawaii. Two other states have already followed suit.

Another poll showed that a majority favored retention of the one-year residence requirement for licensure, so this is the official stand of HMA, although the committee recommended that government physicians should be exempt from taking the State boards, and should be allowed to extend their L&T licenses as long as they remain in government service. They decided not to support reducing requirements for foreign medical graduates, and to study the question of reciprocity further.

The committee voted to draft a bill to provide for usual-and-customary fees for workmen's comp cases. It voted to support a variety of bills on pollution of our air and water. Today, ecology is the watchword. It supported expanded "family planning" clinics—ecology again. And many others. Thanks, men, for all your hours and sincere efforts.

The ad hoc **Committee On Drug Abuse** had regular meetings, plus an emergency meeting because of a vast array of bills dealing with this pressing problem. The committee supported the concept of a coordinated attack on the problem, but felt that it could not be solved solely through law enforcement, but that this must be coordinated with education, treatment, and rehabilitation. They proposed that all the drug bills be tabled, rather than dealt with individually in a fragmented way, and asked for a conference between the legislature and the scientific disciplines involved to develop a comprehensive program.

The committee discussed the separation of *use* from *abuse*, and both from *trafficking*. HMA is concerned with *intoxication*, defined as follows: "Intoxication is an observable alteration in be-

havior or personality due to substance use which is detrimental to the user or to others. One or few violations should be viewed as a misdemeanor. Repeated or chronic violations should be viewed as a medical illness."

Finance voted to take monies now in several savings-and-loan companies, and invest them in two-year certificates at 6%. It recommended that the HMA enter into an aggressive investment program involving the purchase of income-producing property. Since the Medical Plaza project is defunct, it voted to invest the \$30,000 previously committed to it by HMA into an income-producing project. It studied the question of combining the retirement programs of HMA and HCMS, but noted that the proposed merger of the two organizations would affect this.

Public Relations approved the suggestion of the *Star-Bulletin* to run pictures and an article on the people involved in open-heart surgery. It received with regret the news of the retirement of Mr. Lytle, who has been public relations counsel for so long. It held another meeting, with representatives of labor, management and communications media, to help wind up the project of trying to improve communications with these groups.

TV-Radio planned a retirement for Mr. Lytle, and suggested the opening TV program next September be on "The Rural Doctor."

Chronic Illness and Aging voted to suggest the 1971 HMA Annual Meeting theme be "New Challenges to Chronic Disease."

Communicable Disease and Immunization noted the success of the rubella program in the schools and approved a plan to immunize as many as possible of the preschool children using a similar program.

The **Bureau of Research and Planning** is working with Dr. Payne on his study of the quality of medical care in the state, and is planning a more active role for HMA in community health planning.

Radiation voted against licensing radiologic technologists, feeling it would produce a shortage of the same.

JOHN BROWN, M.D. ■

Physician, Know Thyself

Visit any doctor's office and you will likely see a placard proudly proclaiming that 100,000 doctors have quit smoking [as well as buying?] cigarettes. Attend any gathering of physicians, however, and you will undoubtedly spot many M.D.'s puffing on the cursed weed. Some smoke surreptitiously, most do so guiltily, a few brazenly with the uneasy bravado of a man facing the firing squad.

Knowledge is power, the wise men say, so perhaps knowing what type of smoker you are may help you find the correct way to kick this noxious habit. According to Daniel Horn, Director of the National Clearing House for Smoking and Health, six different factors characterize most people's smoking. "The first kind of smoker is the one who uses his cigarette smoking in order to increase positive emotional feeling. Among these is the smoker who smokes for stimulation. For these people a cigarette helps them get started in the morning. It helps them marshal their energy. Another kind of smoker uses the cigarette for its manipulative aspect—the muscular acts of handling a cigarette, watching the smoke, and so on. A third kind of smoker uses the cigarette to accentuate the pleasure state that he is already in. The critical point here is that he feels good to begin with and he finds that the cigarette makes him feel even better.

"A fourth kind of smoker is quite different. This is the smoker who uses the cigarette in order to reduce negative feeling. He is the one who feels depressed and smokes in order to keep from feeling so bad. The fifth kind of smoker is the habit smoker. This is the person who no longer has any emotional experiences attached to his cigarette smoking, but smokes simply because he has done it so often that he smokes automatically without being aware of it. It gets to be a mechanical act.

"Finally, the sixth type of smoker is the one we call the psychological addict, or psychological dependent. This is the one who develops a sense of craving for the cigarette. The moment he puts out one cigarette he begins to want the next one. This is a cyclical phenomenon."

Pharmacological Follies

Ever notice that whenever a new drug appears on the market it is immediately found to be effective in many diverse and hard-to-treat conditions? A familiar example, of course, is cortisone. Initially touted as the panacea for all ills of the flesh, it has now fallen into relative disrepute, being useful only in certain allergic disorders and for insuring a plentiful supply of bearded ladies for circuses.

The current darling of medical therapeutics seems to be L-dopa. Initially used for the treatment of Parkinsonism, it is now being touted as a restorative for flagging sexual desire and also for ameliorating asthma. Within the next few months, we can undoubtedly anticipate glowing reports of its effectiveness in arthritis, tension headache, and psoriasis, plus an encouraging preliminary trial of its use as a contraceptive among the natives of the central Amazon.

Intensive Care Syndrome

With every hospital enthusiastically planning bigger and better intensive care facilities, perhaps the views of Dr. John Todd (*Lancet*, March 28, 1970) might give us cause for reflection. He writes: "When dealing with very ill patients, it is easy to assume that the more is done the better. If a patient has assisted respiration, tracheostomy, continuous oxygen, and a drip in each arm (into one of which is going blood and the other various potent drugs), along with monitoring of all parameters, the physician can solace himself, when the patient dies, that everything possible has been done. And even if the physician has his doubts, the relatives will take it for granted that the finest scientific medicine has been used. Yet one may sometimes suspect either that the patient's condition was intrinsically hopeless—so it was futile to give treatment—or that the prospects of recovery were worsened rather than helped by this intense activity. Most of the great triumphs of modern medicine are achieved comparatively simply—by the ordinary standard operations and by antibiotics, diuretics, digitalis, and replacement drugs such as insulin, iron, and cyanocobalamin.

W. PHILIP JONES, M.D. ■



University of Hawaii.....

The sections of pediatrics and psychiatry are sharing the appointment of **Leigh Sakamaki, M.D.**, at the Assistant Professor level. Dr. Sakamaki obtained both his undergraduate and M.D. degrees at the University of Michigan and interned at the Queen's Medical Center in Honolulu. He was a resident in both the San Diego Naval Training Center and the neuropsychiatric institute at the University of Michigan. Since 1966 he has been director of the child guidance clinic and of the psychiatry section at the Children's Hospital in Honolulu, and has also been a psychiatric consultant at the counselling and testing center at the University of Hawaii. His appointment will further strengthen the close ties between the Children's Hospital and our school of medicine.

The department of pediatrics has also appointed **Amelia Reyes Jacang, M.D.**, as instructor in pediatrics. Dr. Jacang obtained her M.D. degree at the University of the East, Manila, and was an intern at the Kuakini Hospital in 1964. She was resident at the New York Polyclinic Hospital and at St. Christopher's Hospital in Philadelphia, and then was fellow in pediatrics and pharmacology of the newborn at the Oklahoma Medical Center. These two appointments in pediatrics will partially compensate for the loss of **Lowell M. Wiese, M.D.**, who, after receiving a Master of Public Health degree at the University of Hawaii, will soon be departing for American Samoa to become director of medical services for Governor John Haydon. Parenthetically, with **Richard Baleh**, previously vice president for continuing education at the University of Hawaii, directing the department of education, the University of Hawaii will be playing an important role in the affairs of American Samoa.

The department of psychiatry has appointed **George C. Bolian, M.D.**, to help **John McDermott** direct the joint residency training program in psychiatry at Queen's Medical Center and the State department of health. Dr. Bolian, a native of Louisiana, attended both the University of Chicago and Harvard University, and then obtained his M.D. from Tulane in 1957. He was a

resident at the University of Cincinnati and was in the military service for three years at the Tripler Army Medical Center. In 1965 he became instructor in psychiatry at the University of Washington school of medicine and moved up to becoming the director of the department of psychiatry at the Children's Orthopedic Hospital in Seattle. Dr. Bolian will be supported in large part by a grant from the National Institute of Mental Health, and his interest is in child psychiatry. It will be interesting to see whether there are enough mentally ill children in the State of Hawaii to test the combined talents of such a team as McDermott, Sakamaki, and Bolian.

One of the world's outstanding authorities on diseases of the liver has been appointed as professor of pathology, beginning June 1970. **W. Stanley Hartroft**, a native of Alberta, Canada, obtained his M.D. degree from the University of Alberta in 1941 and was resident under **William Boyd** at the University of Toronto from 1946 to 1954. He progressed from research associate to full professor at the Banting and Best department of medical research at the University of Toronto. He then became professor and chairman of the department of pathology at the Washington University school of medicine, St. Louis. Later he returned to Toronto as the director of the research institute of the hospital for sick children and professor of physiology at the University of Toronto. Dr. Hartroft is a member of 48 national and international professional societies and has published more than 200 scientific articles. His interests center around nutrition and the liver, and he is particularly known as an expert on alcoholic cirrhosis.

The department of anatomy has appointed **Robert J. Teichman, Ph.D.**, as assistant professor. Dr. Teichman is a native of Detroit and got his doctorate degree at Wayne State University in 1969. His particular field of interest is the electron microscopy and biochemistry of spermatozoan enzymes. Dr. Teichman will also be responsible for teaching gross anatomy with the help of members from the clinical faculty.

ROBERT W. NOYES, M.D. ■

This 73-year-old Chinese man presented with a one-week history of gross hematuria. Microscopic hematuria was documented, but the urine was not infected and no other abnormalities were noted. In 1962, he had an episode of acute cystitis with associated hematuria which was treated with antibiotics and cleared without subsequent difficulty. He had no other previous history of voiding problems other than some slowing of his stream over the years. He denied frequency, difficulty initiating voiding, or any pain or discomfort. There was no history of previous surgery or hospitalization.

An intravenous urogram was obtained and the 20-minute film is presented for your diagnosis.



The patient was treated cystoscopically by crushing and evacuating approximately 20 round stones, all 1-2 cm in size. He was also placed on Allopurinol with subsequent return to serum uric acid to normal levels.

This patient's chemistry profile showed an elevated serum uric acid of 10.5 mg%. The patient was treated cystoscopically by crushing and evacuating approximately 20 round stones, all 1-2 cm in size. He was also placed on Allopurinol with subsequent return to serum uric acid to normal levels.

X-ray diagnosis: 1) Uric acid bladder calculi. 2) Cholelithiasis (single large RUQ calcification). 3) Calcified mesenteric lymph nodes (RLO). 4) Osteoarthritis lumbar spine, marked. 5) Narrowed L4-5 interspace. The radiolucent filling defects in the contrast-filled bladder represented uric acid calculi. These stones were not apparent on the scout film. When they are pure, they can only be defined as negative filling defects. They must be differentiated

Submitted by the
Radiological Society of Hawaii
VIRGIL R. JOBE, JR., M.D. ■

This is the eighty-fourth installment of In Memoriam—Doctors of Hawaii.

Gideon MacDonald Van Poole

Gideon MacDonald Van Poole was born in Salisbury, North Carolina, on September 2, 1876, the son of Otho and Lucretia (Lentz) Van Poole.



DR. VAN POOLE

He attended the University of North Carolina and then the University of Maryland from which he received his M.D. in 1899. In 1904 Dr. Van Poole attended the Army Medical School. He did postgraduate work at the Manhattan Eye, Ear and Throat Hospital from 1908 to 1909. Additional study was received at the following: Chicago Polyclinic 1909-1912, Tulane University, University of Vienna for three months in 1926-1927 and for four months in 1929 and 1930 and at London, Oxford, Praguc, and Vienna for five months in 1933.

Dr. Van Poole was commissioned acting assistant surgeon in the U. S. Army in 1900. In 1901 he became a first lieutenant, in 1906 captain, 1910 major, 1917 lieutenant colonel, and in 1918 he attained the rank of full colonel. During his career in the Army Dr. Van Poole served in China during the Boxer uprising, took part in the Philippine insurrection, and was present during the Mexican border trouble. In 1917 he organized, trained, and equipped Evacuation Hospital No. 6 at Ft. Oglethorpe, Georgia, and took the organization to France. There he served in two major engagements for which he was decorated by the French government.

He first came to Hawaii in 1913, when he served three years as a surgeon at Schofield Barracks.

In 1920 Dr. Van Poole retired from the Army and came to Honolulu to set up a private practice. He served on the staffs at Queen's, St. Fran-

cis, Kapiolani, and Children's hospitals. He was also eye, ear, nose, and throat specialist for Leahi Home, Kalihi Receiving Station, and the government hospital for the insane at Kaneohe.

Dr. Van Poole died April 12, 1950, in Honolulu at the age of 73.

He was a member of the American Bronchoscopic Society; American Ophthalmological Society; American Laryngological, Rhinological and Otolological Society; American Academy of Ophthalmology and Otolaryngology Fellow; American Medical Association; American College of Surgeons; Honolulu County Medical Society (President, 1925); Hawaii Territorial Medical Association (President, 1934-1935); American Medical Association of Vienna; Pacific Coast Otorhinological Society; Scottish Rite Mason; Shriner; Honolulu Chamber of Commerce; Chicago Athletic Club; University Club; and the Commercial Club.

Benjamin Collins Woodbury

Benjamin Collins Woodbury was born August 13, 1882, at Patten, Maine. He was the son of Dr. Benjamin Collins, a homeopathic physician, and Matilde Albina (Knowles), and a descendant of John Woodbury, who came from England 1624-1625, settling at Cape Ann, and in 1626 became one of the founders of Salem, Massachusetts.

He attended Patten Academy and received his M.D. from Boston University Medical School in 1906. Following graduation Dr. Woodbury began his practice in Lewiston and Winthrop, Maine, and in 1907 moved to Portsmouth, New Hampshire, where he practiced for the next nine years.

Dr. Woodbury married Miss Gertrude Francis O'Neill of Boston at Eliot, Maine, on June 18, 1915.

In August, 1916, the doctor arrived in Honolulu, the following month he received his license to practice, and by November he was occupying the house and office of Dr. George Augur, another homeopathic physician who had gone to Japan. During his stay in the Islands, Dr. Woodbury took a lively interest in dramatics and was a member of the Lanai Players, the proceeds from whose

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★Textbook of Nuclear Medicine Technology

By Paul J. Early, B.S., Muhammad Abdel Razzak, M.B.B.Ch., D.M., M.D., and D. Bruce Sodee, M.D., F.A.C.P., 378 pp., \$15.50, The C. V. Mosby Company, 1969.

THIS BOOK FILLS a void which has been apparent in the nuclear medicine literature for some time—the need for a practical handbook aimed at technologists. It began as an outgrowth of a physicians' training program in nuclear medicine and was extended when the Nuclear Medicine Institute in Cleveland became a major center for technologists' training. The section on nuclear science (background in radionuclides, biologic effects, principles of instrumentation and counting) is straightforward, easy to understand and yet sufficiently comprehensive. The section on clinical nuclear medicine is unusually helpful to technicians since it describes the basic anatomy, function, surface anatomy, and pathology of organs as well as the step-by-step techniques in the specific tests.

Much of this type of information is presumed knowledge by physicians but often difficult for technicians to find conveniently.

Limitations are mainly in the lack of depth and oversimplification, both of which can be supplemented by other books such as Wagner's "Principles of Nuclear Medicine" and Bland's new edition of "Nuclear Medicine," along with the current literature. This book should be within easy reach of every nuclear medicine technician.

ROBERT A. NORDYKE, M.D.

★Digitalis

Edited by Charles Fisch and Borys Surawicz, 230 pp., \$14.75, Grune & Stratton, 1969.

THE EPILOGUE by Charles K. Frieberg clearly summarizes the two divisions of this volume in a nutshell. The first 117 pages are divided into three sections, namely the (1) chemistry and metabolism of digitalis, (2) the effect of digitalis on ion fluxes and contractility, and (3) electrophysiological aspects of digitalis. The fourth section covers the "Clinical Use of Digitalis" in another 54 pages.

In reviewing this text, one has the feeling that a superb symposium was given at the Indiana University School of Medicine with so many articulate authorities on this subject. Thanks to the foresight of the two authors, all the papers presented were compiled into this most informative monograph. The numerous illustrations and excellent bibliography makes this a complete text on the current views of digitalis: it is, indeed, by far the best reference that I can recommend to internists and cardiologists, as well as those in investigative studies, on cardiac glycosides.

A monograph such as this should be published periodically to summarize the current basic scientific aspects of digitalis and also the current clinical application of this drug.

COOLIDGE S. WAKAI, M.D.

★ means highly recommended.

★Vesicoureteral Reflux and Its Treatment

By Chester C. Winter, M.D., F.A.C.S., 146 pp., \$13.95, Appleton-Century-Crofts, 1969.

THIS MONOGRAPH presents only the pertinent aspects of vesicoureteral reflux. The different factors in the etiology of this defect are presented in an orderly and interesting manner. The many antireflux operations are well described and illustrated.

Dr. Chester Winter, an internationally known authority on the urologic use of radioisotopes, describes some added uses of radioisotopes in regard to vesicoureteral reflux. He also describes his experiences with the Witherington operation (10 cases).

Dr. Winter has reviewed the voluminous literature dealing with vesicoureteral reflux and has recorded his opinions and experiences with clarity and brevity.

IWAO WILLIAM SHIRAKI, M.D.

★Clinical Cardiopulmonary Physiology
(Third Edition, Revised)

Sponsored by the American College of Chest Physicians, 755 pp., \$45.00, Grune & Stratton, 1969.

EXCELLENT. Recently updated. A MUST for all hospital and major libraries.

BERNARD YIM, M.D.

Structural Units of Medical and
Biological Terms

By J. E. Schmidt, M.D., 172 pp., \$7.50, Charles C. Thomas, 1969.

THIS VOCABULARY or glossary of medical and scientific terms, each with its etymological basis and a few examples of words derived from that root, suffers from so many omissions and so many mysterious inclusions that it cannot be recommended, not even for very young persons or for medical secretaries.

Such common and sometimes puzzling words as nanometer, lichen, urticaria, eczema, atopic, amyloid, psoriasis, and pityriasis are not given or referred to; "mandible" is not accounted for under "chin (lower jaw)"—the only roots given are *genion* (example, microgenia) and *mentum* (example, mentalgia)! Catheter, cathode, and cathetometer are not referred to. Under fungus, the vitally important root *phyt-* (dermatophytosis, etc.) is ignored: only fung- and mycet- are mentioned. Under smell and odor, brom- (bromidrosis) is not given.

Curiosa, always abundant in Dr. Schmidt's publications, are not lacking. "Nudoneiria" (dreams of nudity), "nudographia," and "nudomania," though not nudophilia, are given. Under "Same (self)" the non-word "ipsation" is said to mean self-gratification: presumably by scratching an itchy scalp.

There are horrors, too: "roentgenize" for "subject to roentgen rays"; "saccate" for sac-shaped (why not saccular, a decidedly adequate and familiar word?); "nutritorium" for "the nutritional system of the body"; and "virilia" for "male reproductive organs." These are non-words, surely.

Erudition is not enough.

HARRY L. ARNOLD, JR., M.D.

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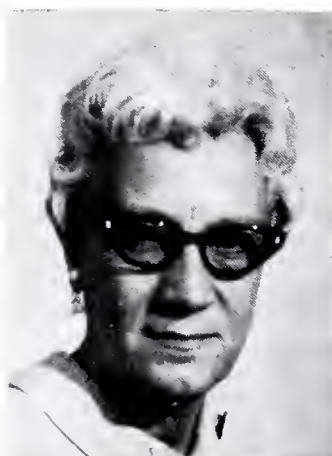


Joseph Battista, M.D.

Waialua Clinic Hospital
Waialua, Hawaii 96791

GENERAL PRACTICE

University of Munich—1961
Internship—Kuakini Hospital—
1962-1963
Residency—St. Francis Hospital—
1964-1965
Queen's Hospital—1965-1967

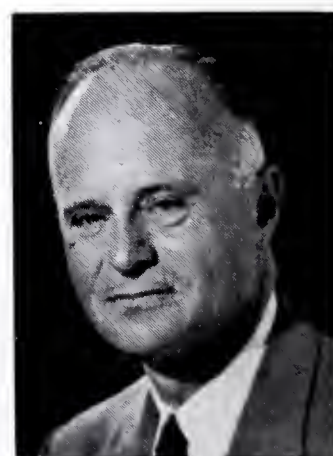


Martha Lou Hefley, M.D.

888 South King Street
Honolulu, Hawaii 96813

GP (OB-GYN)

University of Tennessee—1935
Internship—John Gaston Hospital,
Memphis, Tennessee—1935-1936
Residency—Women's Hospital,
Toronto, Canada—1936-1937

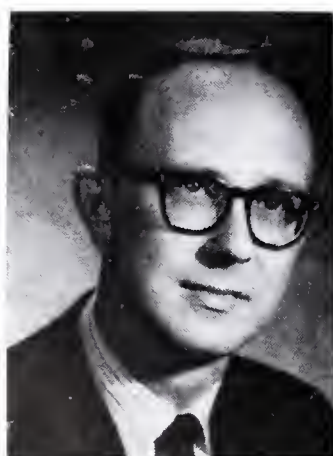


Egbert H. Fell, M.D.

Kona Medical Associates
Kealahou, Hawaii 96750

SURGERY

University of Chicago—1931
Internship—Presbyterian Hospital,
Chicago—1931-1932
Residency—Municipal Disease
Hospital, Chicago—1933-1934
Presbyterian Hospital—1934-1936

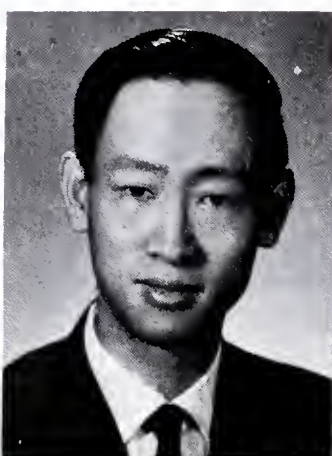


Charles L. Langeberg, M.D.

4614 Kilauea Avenue
Honolulu, Hawaii 96816

PEDIATRICS

University of Minnesota—1966
Internship—University of
West Virginia
Residency—University of Miami—
1967-1968
University of Oregon—1968-1969



Ramon K. Sy, M.D.

1697 Ala Moana Blvd.
Honolulu, Hawaii 96815

ENT

University of Santo Tomas—1960
Internship—Deaconess Hospital,
Buffalo, New York—1961-1962
Residency—University of Chicago
Hospital—1962-1966



Donald E. Dietrich, M.D.

P. O. Box 928
Kihei, Maui 96753

RADIOLOGY

University of Southern California—
1950
Internship—L.A. County Hospital—
1950-1951
Residency—Cincinnati General
Hospital—1961



David Allen Fisher, M.D.
 888 South King Street
 Honolulu, Hawaii 96813
DERMATOLOGY
 Tufts University School of Medicine—
 1963
 Internship—San Francisco General
 Hospital—1963-1964
 Residency—Boston V.A. Hospital
 (Medicine)—1964-1965
 Massachusetts General Hospital
 (Dermatology)—1965-1966
 U.C. Medical Center, San Francisco
 (Medicine)—1966-1967
 U.C. Medical Center, San Francisco
 (Dermatology)—1967-1969



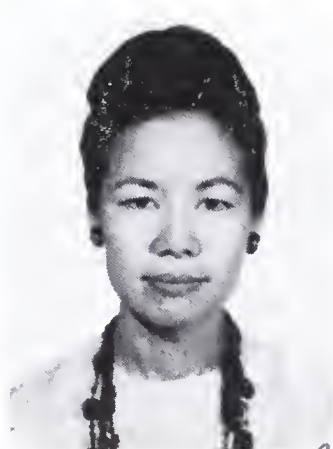
Ronald M. Yamaoka, M.D.
 888 South King Street
 Honolulu, Hawaii 96813
NEUROLOGY (PEDIATRICS)
 Indiana University—1960
 Internship—Los Angeles Co.
 Hospital—1960-1961
 Residency—Buffalo Children's
 Hospital—1961-1962
 Indiana University Medical Center—
 1962-1963
 Indiana University—1963-1966



Jack Hall Scaff, Jr., M.D.
 1133 Punchbowl Street
 Honolulu, Hawaii 96813
**INTERNAL MEDICINE,
 CARDIOLOGY**
 State College of New Jersey
 (Seton Hall College of Medicine)—
 1961
 Internship—The Queen's Hospital—
 1961-1962
 Residency—The Queen's Hospital—
 1962-1963
 Memorial Hospital, Long Beach,
 California—1966-1969



Robert D. Bart, Jr., M.D.
 1133 Punchbowl Street
 Honolulu, Hawaii 96813
PEDIATRIC NEUROLOGY
 University of Wisconsin—1963
 Internship—The Queen's Hospital—
 1963-1964
 Residency—Kauaikeolani Children's
 Hospital—1964-1966



Namiko Kominami, M.D.
 888 South King Street
 Honolulu, Hawaii 96813
INTERNAL MEDICINE
 Woman's Medical College of
 Pennsylvania—1962
 Internship—Philadelphia General
 Hospital—1962-1963
 Residency—Georgetown University
 Hospital—1963-1964
 Queen's Hospital—1964-1965



Daniel H. Bessesen, M.D.
 86-234 Farrington Highway
 Waianae, Hawaii 96792
GENERAL PRACTICE
 University of Colorado—1961
 Internship—St. Anthony Hospital—
 Denver, Colorado—1961-1963

Medicare Review Committee (Dialogue therefrom)

Gordon Lin reviewed a case of bleeding "factitial proctitis" receiving 80 mg of Depo-Medrol once weekly (!) and wondered what the condition was . . . **Tom Frissell**, in a jovial mood, rejoined, "The guy has been scratching himself . . ." **Vic Hay-Roe** asked mischievously, "It's not fictitious proctitis, is it?"

Bernie Fong engages in sheer poetry, "This is a case of, quote, Unusual complexity,' unquote . . . and the final diagnosis is 'anemia due to uremia' . . ."

Gabe Ma explained, "There are a neurosurgeon and an orthopedic surgeon involved in this disc case . . . They charge an additional fee for exploring an extra space . . ." **Tom Frissell**, recalling how close he came once to operating on the wrong eye, wondered: "You're sure they went in on the right level initially?"

Bernie Fong: "This patient has glossodynia and was getting daily B12 injections." **Vic Hay-Roe** asked, "Into the tongue?" **Bernie** offered, "Perhaps we can recommend to the physician that the patient take B12 tabs orally . . ." **Lup Pang** wondered, "Maybe the injections have a psychological effect . . ." **Bill Dang**: "Anyway, if she really has glossodynia, she can't swallow the tabs . . ."

Bill Dang excerpted from an operative report: "and the wound was closed in a typical Tom Jones manner."

We wondered about a difficult chest case being reviewed by **Vic Hay-Roe** as he kept referring to Doctors A, B, and S. We later learned that Dr. S was really the good guy and that we had been reviewing one of **Art Sprague's** cases . . . "This chart is replete with progress notes from Doctor A and Doctor S, but not from Doctor B . . ."

114th Annual Meeting of the Hawaii Medical Association

We started early intending to catch **Prexy George Mills' 7:30 A.M. "Call to Order,"** but like many of the others, we were mired in the hopeless parking maze beneath the Hilton Hawaiian Village Coral Ballroom and arrived too late. Moderator **Varian Sloan** was unusually bright-eyed and bushy-tailed for so early in the morning and tried to show bravado in the face of the small audience as he introduced the first speaker, **Diek Kelley**. Poor **Dick** is forever being reminded that he is the son of Waikiki hotel magnate **Roy Kelley**, but **Varian** also remembered him as a kid hitting a 300-yard drive off the first tee at OCC before he went off to Harvard. **Dick** gave an effective lecture on the ABC's of acid-base disorders and the monograph he distributed, entitled "Introduction to the Laboratory Diagnosis of Acid-Base Disorders," is a must reading . . .

Mits Tottori, armed with zoom-lensed Nikon camera, realized a long nurtured ambition of becoming an ace photographer as he moved along taking candid shots of the speakers, the audience and the booths. He sat next to us and explained apologetically that he was the daytime photographer assigned to the sessions, and that **Arthur Wong** was the evening man. Sure enough, in the evening, we met **Arthur Wong** loaded down with even more gear and looking equally professional. **Art** explained that he had been covering the HMA meetings for several years

in lieu of a hired professional photographer and was reimbursed only for the cost of the films.

At intermission time, we rushed to the Superior Coffee Company booth, where the attendant had just arrived, and the 3 coffee pots (holding 6 cups each) were just starting to heat while a long line of bleary-eyed physicians waited anxiously. Later, we met a frustrated **Sam Waxman** who complained that he had made three abortive attempts that morning with that coffee line. The coffee supply always ran out just as he got to the head of the line . . .

William Tooley, a tall athletic figure with sideburns, maneuvering on crutches (because of an ununited fracture of the femur), who is associate professor and chief of newborn service in the department of pediatrics of the University of California Medical Center, spoke at length in a slow, well-modulated voice on fetal and neonatal circulations. **Bill** feels that circulation is the most important aspect of asphyxia, and advocates rapid infusion of NaHCO_3 for restoring normal pH. He feels that contrary to prevailing concepts, rapid infusion of NaHCO_3 is not particularly fraught with danger . . .

We hopefully attended the 7th Fireside Conference sponsored by the Hawaii TB and Respiratory Disease Association and heard **John Murray**, a youngish, tall, slender, pleasant voiced professor of medicine and chief of the chest service in the S.F. General Hospital, give an effective talk on "The New Face of TB." But the rest of the session deteriorated into round table discussions so crowded together that the speakers dared not raise their voices lest they disturb the other tables. We tried unsuccessfully to eavesdrop, so in frustration we dutifully guzzled the draft beer and munched the pretzels provided by the Pfizer Company. As we left early, we tried to explain to **Carl Mason**, one of the moderators, that future sessions could be more effective in less crowded quarters, but were rebuffed by a typical **Mason** retort: "Well, I got them here, didn't I?" with that What-More-Do-You-Want air . . .

On Wednesday morning, we fared better with the parking maze and its confusing "Parking" and "Exit" arrows. As we hurried towards the elevators, **George Hennessey** in his Toyota, looking ever so happy, screeched past us, with burning tires and shifting gears making like the Grand Prix. We managed to catch **John Murray's** lecture on "Pulmonary Physiology: Control of pH." **John** gave a well organized, straightforward, if dry lecture on hypoxia, its causes and treatment.

George Mills introduced AMA President **Gerald Dorman** as "the ideal commanding officer—childhood hero—popular student—outstanding physician—perfect boss—wonderful husband—great human being . . . who has crammed an incredible variety of careers and activities and hobbies into his 66 years . . . The standing joke is that Dr. Dorman has made a career of retiring—he retired from the Army, he retired from New York Life, and he retired from state medical society work—now he's busier than ever with AMA activities, travel, and hobbies . . . I don't think he'll ever retire . . ."

Gerald Dorman we found to be a rotund, spare-domed, white-mustachioed, ruddy-complected, bubbling personality with eyes twinkling with amusement, and a most flexible mind, who emphasized that "The right of health involves responsibility . . . but things are moving so fast that it reminds me of the story of the Chinese fortune cookie that said, 'Disregard last cookie.' . . . The problems are everywhere . . . Many people have the

wrong concept of free health care . . . One of the problems is that people expect a lot more than they need, such as heart transplants . . . They tell me that with the new freeways, we can get all the hearts we need . . . We may have to carry cards saying, "Dr. Denton Cooley, please do not take mine!" . . . The question is what sort of program should we adopt . . . No single program can meet the needs . . . different areas have different needs . . . Our resources are our brains and experience . . . We need the enthusiasm of the young and the experience of the olds . . ." (Sorry about our disjointed notes, Dr. Dorman, but so was your address . . . Your delivery, however, was superb!)

John Moncrief, professor of surgery at the Medical College of South Carolina, a tall, swarthy Frenchman with a Southern air and accent, covered every aspect of shock in the hour assigned. John's "A Rational Approach to the Therapy of Hemorrhagic Shock" provided us with voluminous notes taken from excellent slides which we need to digest at leisure.

In the evening session, **Dick Mamiya**, associate professor of surgery at our U of H Medical School, discussed fluid therapy in concise, intelligible language. Dick pointed out that whereas the prevailing concept has been of salt and water restriction, the newer [as well as the older!—Ed.] concept is the liberal use of salt and water. Dick covered baseline requirements, the sources of fluid loss and their management in preoperative, operative and postoperative phases. Dick was followed by **Kenneth Gardner**, professor of medicine in the U of H Medical School, who lectured on hyponatremia, its causes and treatment, but by late evening, we are afraid, we were too exhausted to absorb much.

On Thursday morning, we listened intently to **Jerome Kassirer**, professor of medicine, Tufts University School of Medicine, another tall, slender, youngish intellectual with sideburns. Jerome discussed the "New Concepts of Diuretic Therapy." Herein are some Kassirer gems:

- Re mercurial diuretics: The days of the mercurials are over . . . the newer diuretics, Furosemide and ethacrynic acid, have taken over . . . they are incredibly effective even in renal disease . . .
- Re metabolic alkalosis secondary to diuretic therapy: The treatment is to give chlorides as potassium chloride, arginine hydrochloride, ammonium chloride, or even as IV HCl . . .
- Re diuretic action: Proximal diuretics interfere with sodium and chloride reabsorption and lead to metabolic alkalosis, whereas distal diuretics block sodium and cation exchange . . . Combinations of diuretics make good physiologic sense. To avoid electrolyte disturbance give a combination of proximal and distal diuretics . . .

- Re refractoriness to diuretics: Give large doses of proximal diuretics or use combinations of proximal and distal diuretics . . .

Jerome Kassirer is a tough act to follow. Well-groomed, meticulous **Neal Brieker**, professor of medicine at Washington U, seemed pallid by comparison as he lectured on metabolic acidosis in chronic renal disease. The diagrams and graphs were oversimplified and he had a knack for speaking so slowly that we lost the gist of thought before he could complete a sentence. Neal spent an hour explaining that with a decrease in nephron population, there is increased phosphate and ammonium ion excretion, but that the ammonium ion excretion cannot keep up, so there is a net hydrogen ion excess which results in acidosis and a decrease in bicarbonate ion concentration . . .

Arnold Siemsen read a paper co-authored by **Herbert Chinn, Livingston Wong, Glenn Kokame, Walton Shim et al** which pointed out the remarkable savings in annual cost of dialysis per patient by reverting to home dialysis. At St. Francis Hospital the annual cost of home dialysis is \$3,744, compared to \$17,800 for center dialysis. Arnold showed how statistics at SFH compare favorably with national figures on all fronts . . .

Reginald Ho, moderating the Friday morning session, introduced **Jerome Kassirer** with these remarks: "There are many ways of looking at man. Poets, psychologists, and politicians have their way. During the last few days we have been looking at him as a collection of semipermeable sacs, semipermeable cells, semipermeable membranes and semipermeable tubules . . ." We could almost hear those gears grinding as **Cliff Moran**, our favorite humorist from Maui, whispered softly from behind us, "That's certainly a pissy way of looking at man . . ."

We found that **Jerome Kassirer** could be modest as well. In discussing renal shutdowns, he told the story of a patient who had been anuric for some time . . . "In one of my fallible moments, I thought she needed a kidney transplant. But she wanted prayer instead . . . She sent for holy water, St. Jude's (?) oil, and some Jewish relics, and had mass held . . . Then she started to put out urine, and she is fine today . . ."

- Re acute renal shutdowns: I look at mannitol with a jaundiced eye and I have the same feeling about diuretics . . .
- Re hypercalcemia: This is never secondary to renal disease. It is a *cause* of renal disease.
- Re IVP in renal failure: Most radiology departments will not do IVP's when the BUN is over 40. Bunk! If the patient is not dehydrated, then renal function will not deteriorate. Use a double dose of contrast material and wait long enough . . . even 8 to 24 hours if neces-

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HARRISON SAMUEL PAYNTER, M.D.

1888-1969

Harrison S. Paynter was born in Des Moines, Iowa, July 21, 1888. After graduation from George Williams College in Chicago and from the University of Chicago, he received his M.D. from Northwestern University Medical School in 1932.

He then became assistant resident physician at Leahi Hospital, in October, 1933. He left there after nearly two years to work at Los Angeles County General Hospital. From March, 1937, to August, 1938, he was resident physician at Olive View Sanatorium in the California town of the same name. For two and a half years, then, he served as medical director of the Vauclain Home of the San Diego County General Hospital, a position he left in February, 1941.

For the next five years he served in Los Angeles

as a chest specialist for the Veterans Administration. He returned to Leahi Hospital as senior resident physician in June, 1946, leaving in February, 1953, to go to Puumale Hospital for tuberculosis in Hilo. There he remained until his retirement in 1958, at the age of 70.

His last years were spent as a patient in the geriatric wards of the hospital in which he had worked for so many years—Leahi Hospital. He died of bronchopneumonia on January 31, 1969. He was survived by his wife, Zora.

Dr. Paynter was a gentle, friendly, quiet man. He wrote one article during his residence in Hilo, entitled Deep Mycoses in Hawaii, which was published in the January-February, 1954 issue of the JOURNAL.

HARRY L. ARNOLD, JR., M.D.

SPECIAL COUNCIL MEETING

December 29, 1969—5:00 P.M.
Mabel Smyth Conference Room, 2d Floor

PRESENT

Dr. Mills, presiding; Drs. Chinn, Batten, Dang, Iaconetti, D. Jones, Lowrey, Miyashiro, V. Sloan, and Tomita, plus Mr. Raymond McWilliams of Peat, Marwick & Mitchell.

A special meeting of the Council was called on December 29, 1969, to review the report of Peat, Marwick, Mitchell & Company. After a prolonged executive session the report was accepted by the Council with modifications. Action on Appendix A and Appendix B was deferred pending outcome of a review by a team to be appointed by the President.

R. VARIAN SLOAN, M.D.
Secretary

COUNCIL MEETING

April 3, 1970—5:00 P.M.
Mabel Smyth Conference Room, 2d Floor

PRESENT

George H. Mills, presiding; Drs. Batten, Chinn, Dang, Iaconetti, Helms (for Jones), Lowrey, Miyashiro, Moore, Tomita, and Sloan; plus Drs. Omura, Goto, Wakai, Sia, Mrs. Clifford Moran, Messrs. Thomas Rice and H. Tom Thorson, Dr. Harold Sexton, and Dr. Beverly C. Payne.

MINUTES

ACTION:

It was voted to accept the minutes of February 6, 1970 as circulated.

REPORTS REQUESTED BY COUNCIL

Professional Activity Study Workshops: At the last Council meeting the Commission on Education and Scientific Research recommended a PAS workshop either in the 1970 HMA Annual Meeting or at some other time. The Council voted to defer this recommendation pending discussion with Dr. Payne.

Dr. Payne was asked to briefly present the value and feasibility of holding a PAS workshop. Dr. Payne stated that the CHPA (Council on Hospital and Physician Activities) does hold two-day workshops twice a month in Ann Arbor, Michigan. Teams also conduct workshops throughout the country. He did not know who funds these workshops.

Dr. Payne said that PAS workshops are of tremendous value to staffs of hospitals. He said that very few physicians become proficient in PAS because it takes more time to learn than most physicians have. Dr. Payne stated that the Medical Records Librarian is the key person in utilizing the PAS material. He would strongly encourage a PAS workshop after his presentation has been completed. Dr. Payne emphasized that the hospitals get the most value out of the workshops.

ACTION:

It was voted to postpone plans for holding a PAS Workshop until a more appropriate time after Dr. Beverly Payne's study has been completed.

Report from the Medical Care Plans Committee: At its last meeting, the Council asked that the Medical Care Plans Committee develop a statement for Council review which would establish an Association policy that would set forth the circumstances under which the HMA should ask the HMSA for statistical information and for performing administrative and fiscal functions not now in its jurisdiction.

The committee recommended to the Council that the Commissioner be responsible for the standing committees under his Commission and keep the Council informed. The committee further recommended that the Bylaws & Parliamentary Committee be asked to spell out the duties and responsibilities of each Commission.

Dr. Moore reported that the committee felt that it could not spell out in detail instances in which a committee could act relative to other groups, because there are too many ramifications involved. Instead, the committee felt that committee action should be the Commissioner's responsibility. The Bylaws do not spell out the duties of the Commission or the Commissioner. If they did it would pinpoint the responsibility and prevent committees from going off independently.

ACTION:

It was voted that the matter of a policy decision be resubmitted to the Medical Care Plans Committee and that they be requested to come up with recommendations in regard to requesting statistical information and for performing administrative and fiscal functions which is to be channeled through proper levels.

It was voted that further refinement of the responsibilities and duties of the Commission and Commissioners be referred to the Bylaws and Parliamentary Committee.

Advice from the Bylaws and Parliamentary Committee: The Bylaws and Parliamentary Committee recommended that no proposed changes establishing functions for the proposed committees on peer review, environmental health, and health manpower will be forthcoming pending decision on whether the committee system should be superseded by a commission system inasmuch as the present Bylaws give the President permission to establish any committees, standing or ad hoc, he wishes without House of Delegates action.

ACTION:

It was voted to accept the advice of the Bylaws and Parliamentary Committee with deferment of any proposed changes.

Political Action: HAMPAC Bylaws have been changed—HAMPAC Board appointments will be made annually and the terms will be extended from six years to ten years. The President will now nominate the HAMPAC Board and the Council will approve the nominees.

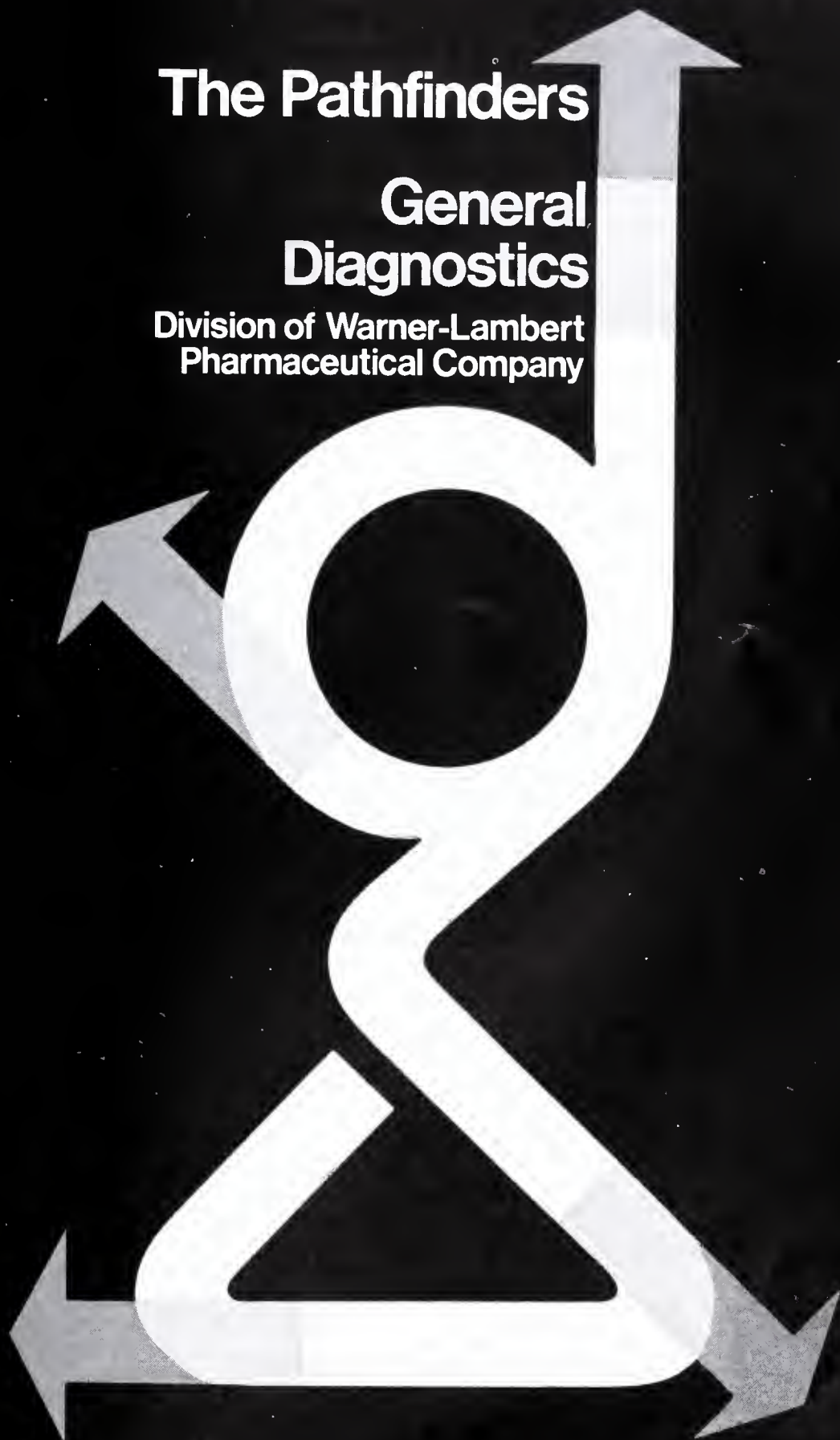
Dr. Mills stated that he will present a slate of nominees to the Council at its next meeting.

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The Pathfinders

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HAWAII TECHNOLOGISTS' BULLETIN

Official Publication of the Hawaii Society of Medical Technologists

Editor: LOUISE WULFF, MT(ASCP), University of Hawaii

Mahalo and Aloha Kakou

With this issue the *Hawaii Technologists' Bulletin*, a feature of the HAWAII MEDICAL JOURNAL since 1958, says, "So long, it's been good to know ya." And so it has. We've all enjoyed reading the rest of the JOURNAL as well as our own pages, and we've enjoyed, and hopefully profited by and learned from, the editorial expertise of the JOURNAL's staff. But now (madly mixing metaphors) we say it is time to cut the umbilical cord, stand on our own two feet, sink or swim, and try our wings by continuing to edit the *Coconut Wireless Nius*, a monthly newsletter, and next spring publishing the first of a series of scientific annuals.

In 1958, Dr. Harry L. Arnold, Jr., was then, as now, editor of the JOURNAL, and Miss Lydia C. Martens, edited the *Technologists' Bulletin* with Mr. Mun Fook Shinn's assistance. When Lydia went back to Minnesota in 1960 Mrs. Ethel Nishibata and Mr. Shinn took over for a short while. Since then the list of technologists serving as editor includes Misses Carolyn McCue, Beryl Uyehara, Edith Eckstein, Stella Yoshida, Mrs. Nellie

Cherevas, and Mr. James Yano.

It seems appropriate to reprint here our first editor's comments on the new venture.

"Our First Issue"

The years 1957-1958 will long be remembered by the Hawaii Society of Medical Technologists for the recognition the group received during that period. The pathologists and hospital administrators became aware of the acute shortage of medical technologists and the need for higher pay and more help in medical laboratories. The Territorial Legislature recognized the group as a source of fees and passed a law, in the closing hours of the session, to license medical technologists in the Territory along with midwives, tattoo artists, and others. The outstanding recognition, of which we are justifiably proud, has been accorded us by the editor of the Hawaii Medical Journal who, with true island aloha, has allowed us space in this excellent news organ. HSMT is duly thankful. We look forward to years of happy and helpful association.

LYDIA C. MARTENS

We feel that the association was happy and helpful and we hope, Dr. Arnold, you and the Hawaii Medical Association think so, too. Aloha.

UH Grads Win ASMT Awards

Three papers submitted—three awards! In what is surely the most exciting news of the decade for Med Tech students at the University of Hawaii, four 1969 seniors not only were asked to read their papers at the ASMT meeting in Detroit in June (see the April issue of *The Coconut Wireless Nius*), but were also later notified that each paper had received an award.

The ASMT third place award of \$75 was given to Miss Carol Torikawa and Mrs. Mary Turley of Kaiser Hospital for their paper "Lymphocyte Typing."

ABSTRACT

The theory involved in lymphocyte typing and the development of this new science is discussed. Although several procedures have been used in an attempt to find an easy, reliable method of typing lymphocytes, only two of these procedures

are presented in this paper for a brief study, including a comparative study with a modified procedure proposed by the authors. Finally, the possible diagnostic value of lymphocyte typing is discussed.

The Scientific Products Foundation award in Hematology, a \$200 award, was given to Miss Susan Pang of The Queen's Medical Center for her paper "A Comparative Study of the Methods and Assays Involved in the Quantitation of Anti-hemophilic Factor (VIII) in Cryoprecipitates and of Plasma Thromboplastin Component Factor (IX) in the Residual Plasma of Cryoprecipitates."

ABSTRACT

Advances in blood component therapy have led to use of cryoprecipitates, a concentrated form of Factor VIII. To find maximum content for max-

imum utilization, a simple and economical method of assay for Factor VIII was sought. Three methods were compared, all variations of the partial thromboplastin time. Hyland's modified method of Langdell; Jung's assay of Factor VIII without hemophilic A plasma; and Britten, *et al's* one-stage kaolin cephalin time technic. Further study was done to assay for Factor IX in the residual plasma of cryoprecipitates. Two such methods and their results were compared. It was found that Britten's method for the assay of Factor VIII was economical and easy to manipulate. For the assay of Factor IX, the method of Didisheim *et al* was found to be economical, although Hyland's method was easier to manipulate. Quantitation of Factor VIII in cryoprecipitates and Factor IX in the residual plasma were also done.

The Scientific Products Foundation award in Immunology, also carrying a monetary award of \$200, was given to Miss Linda Harloe (now intern at St. John's Hospital in Santa Monica) for her paper, "The Immunological Determination of Hemopexin in Normal and Hemolyzed Human Serum."

ABSTRACT

The ability of human serum protein to bind hemoglobin is studied with regard to the role of hemopexin—a beta₁ glycoprotein capable of binding heme. Levels of hemopexin are determined in normal and hemolyzed human sera by a variety of immunological techniques. Attention is given to the methods of double gel diffusion, capillary tube precipitation, and radial immunodiffusion. The most sensitive procedure used in this study for the determination of human serum hemopexin was polyacrylamide gel electrophoresis followed by immunodiffusion.

Results from the electrophoretic tests made in this study add support to the theory that hemopexin is absent or markedly reduced in sera from

patients with hemolytic disorders. Using anti-hemopexin made in goats, the precipitation band of hemopexin was seen on the immunodiffusion plate with normal human serum, whereas no band was seen using the same anti-hemopexin with serum from a patient having thalassemia. The absence of the hemopexin band in the thalassemia sample is attributed to the fact that hemopexin is bound to heme and this complex is removed from the circulation by means of the reticuloendothelial system.

The immunological determination of hemopexin was based on two different antibodies—anti-hemopexin made in rabbits, and anti-hemopexin made in goats. Significant results were obtained with the goat antiserum only, and more study is needed to explain this.

The physical and chemical properties of hemopexin are given, indicating that this glycoprotein may be an important back-up mechanism to the haptoglobin-hemoglobin binding system. After the haptoglobin has been saturated (bound to approximately 135 mg/100 ml of hemoglobin), hemopexin takes over the binding of heme before met-heme-albumin is formed.

Misses Torikawa, Pang, and Harloe all attended the ASMT National Convention, where their awards were presented to them at the Annual Awards Dinner and where they each read their papers.

Credit should be given to the labs in which the students worked and to those they worked with: Mr. James Yano, then Head Technologist at Kaiser Medical Center; Mrs. Lorene Leong, Chief Technologist at The Queen's Medical Center; Dr. Y. Hokama, Immunologist in the Medical School; and Miss Ann Stegmaier, at the Honolulu Blood Bank, all assisted by providing time, space, supplies, and personal assistance. Miss Pat Taylor of the University of Hawaii Med Tech Division assisted in the preparation of the manuscripts. ■

sary . . . (We can almost hear our radiologists dissent, but then dissent is healthy . . .)

- Re low salt diets: Do *not* put a patient with chronic renal disease on a low salt diet unless he has edema or heart failure . . .
- Re hypertension in chronic renal disease: Renal function always improves with control of hypertension . . .

HMA Banquet

In our ignorance, we had quaked at the thought of the long dreary drive, the dull evening, some chintzy country joint, and lousy food, for the staggering price of \$12.50 per head, but never have we been so wrong. Before the evening was over, we could not recall an evening we had enjoyed more . . . Well, the menu of "Prime Rib à la Chinn," au "Varian" potatoes, Goto's Baby Carrots, Lowrey's Seasoned Salad, Winnie Lee's Rolls, O'mura's Coffee, and Dorman's "Pie-in-the-Sky" topped with Quisenberry Ice Cream was no different from common recipes with less exotic names, but then "Along Came Tamura." Paul, who is universally recognized as a wizard master of ceremonies, was at his best as he kept us in rollicking hilarity throughout the evening with his unexcelled patter of wit and dig . . . Since we were still reeling from the mixture of Scotch and Bourbon (Scotch ran out early, you know . . . from our experience, physicians are mostly Scotch drinkers), Paul first asked, "Why is a Martini like a woman's breast?" . . . Well, one is too few and three too many . . . O. D. Pinkerton was called to say grace. We feel that some of our less gifted haranguers from the pulpit can take lessons from O.D. for his grade was an ecclesiastic perfection, with that certain sonorous quality that hushes the atmosphere and tingles your hair roots . . . "Our Father in Heaven . . ." he intoned and we bowed our heads reverently till the final "Amen . . ."

Then followed the Kailua High School Madrigal Singers under Shigeru Hotoke, with their brilliant repertoire of song and dance, including some Japanese numbers like "Soran Bushi," picked up during their tour of Japan. The hour-long entertainment itself was worth the price of the evening, but then there was more to come . . .

George Goto, who in his mid 40's still looks like a shy teenager, stood fidgeting on the platform, frowning his brow, and shifting from one foot to the other as Paul Tamura gave with a "This Is Your Life" type of biographical sketch before awarding him the House of Delegates resolution commending him for his work with the Legislature . . . We took the liberty of excerpting herein some of Paul's comments: "Dr. George Goto grew up on a plantation in Makaweli, Kauai . . . He was quite a rascal in those days of youth . . . In the third grade, he was expelled from school . . . At about age 10, his favorite idol was Tarzan and he spent many hours hiding in trees to get out of doing chores . . . When World War II began, George was in his second year at the U of H. When the 442nd was activated, Dr. Goto went to Italy . . . He was seasick the entire 45 days it took the USS Liberty to cross the Atlantic. (To this day, he turns green everytime he goes to the beach.) George was probably the only soldier who rode across Italy—when he was in full marching dress, with rifle and bayonet, he couldn't walk because the rifle and bayonet were taller than he was! . . . When he arrived at Washington U in St. Louis, he had one Aloha shirt and \$50.00 in his pocket. He graduated *cum laude* from Washington U in 1951 and returned to the islands in 1955 with his wife, Caroline—a nurse he met while at Washington U, and who had been supporting him . . ."

An equally embarrassed character named H. Yokoyama felt devastated as he was extolled similarly, but we wish to thank all those responsible for his House of Delegates resolution. We shall always remember that proud moment of glory when George Mills in his farewell speech declared, "The HMA is what it is because

of the Paul Tamura's, the George Goto's, the Henry Yokoyama's, et cetera, et cetera . . ."

A very abashed Fred Lam, Sr., let out with a loud grunt when George Mills announced that he was the recipient of the Special Recognition Award, and then started to enumerate Fred's many accomplishments during his 76-year lifetime. We worried, as Fred staggered to the podium, lest he collapse from the shock of the occasion. Equally surprised was George Bracher of the Big Island when he was named the 1970 recipient of the A. H. Robins Community Service Award and named "Hawaii's Physician of the Year." George had had to be dragged bodily to the banquet by his wife, who had had to resort to every feminine ruse she could muster. Even at the banquet, he kept fidgeting about catching an earlier plane home . . .

Even the invocation ceremony, presided over by AMA President Gerald Dorman, was hilarious, for someone misplaced the list of new officers and councilors to be sworn in and George Mills had to ad lib. Somehow John Lowrey was sworn in as president, Herbert Chinn as president-elect, Varian Sloan as secretary, and Tom Frissell as treasurer.

Before concluding the formal portion of the program, Paul acknowledged the efforts of Ted Tomita, who had put the banquet together; Herb Uemura, who had handled the scientific sessions; Varian Sloan, who had arranged the whole shebang; and the Woman's Auxiliary, especially Mae Kagihara, who helped make this 114th Annual HMA Meeting a most memorable one for years to come . . . (We should also thank Cool Wakai, the commissioner in charge, and especially the combined efforts of the HMA staff, Becky Kendro, Heather Akana, Bess Chang, Phyllis Hashimoto, and Joella Kawamoto, who put in effort beyond the normal call of duty.)

The evening was still to continue with a "Professional Music Hour" staged by our non-professionals. John Smith proved to be a versatile vaudeville man who first called on Barbara Mills to perform one of her hulas, but then her accompanists failed to show and Barbara had to tell one of George's favorite jokes, instead, John followed suit with a medley of impersonations and ribald jokes which kept the audience in spasms. We learned that vodka mixed with milk of magnesia is a "Phillips screwdriver" and that vodka with prune juice is a "pile-driver." "How do porcupines make love?" John whispered ecstatically, "V-e-r-y carefully." We were enthralled by Betty Lawson's "Beyond the Reef" and "Waikiki" accompanied by John Roberts, and the electric guitar renditions by the Carl Johnsens. . . . But John with his jokes was the greatest . . . As we left, the towering Waimanalo cliffs seemed to still reverberate with the echoes of our laughter . . .

Second Annual Birth Defects Symposium—"Disorders of Glucose Metabolism in Children," the second annual Birth Defects Symposium, will be October 30-31, 1970, at the University of Florida College of Medicine, Gainesville, Florida.

Registration fees will be waived for interns and residents. For additional information and schedule of fees, please write Mrs. Betty L. Howard, Division of Postgraduate Education, J. Hillis Miller Health Center, Gainesville, Florida 32601.

The White House Conference on Children and Youth has announced plans to hold a series of six Regional Conferences during 1970. The Conferences nearest this area are set for Denver, November 4-6, and for Portland, November 12-14.

Stephen Hess, National Chairman, says the Conferences will focus on the problems of the age group 0-13 years. The Regional Conferences will be followed by a National Conference in Washington, D.C., December 13-18.

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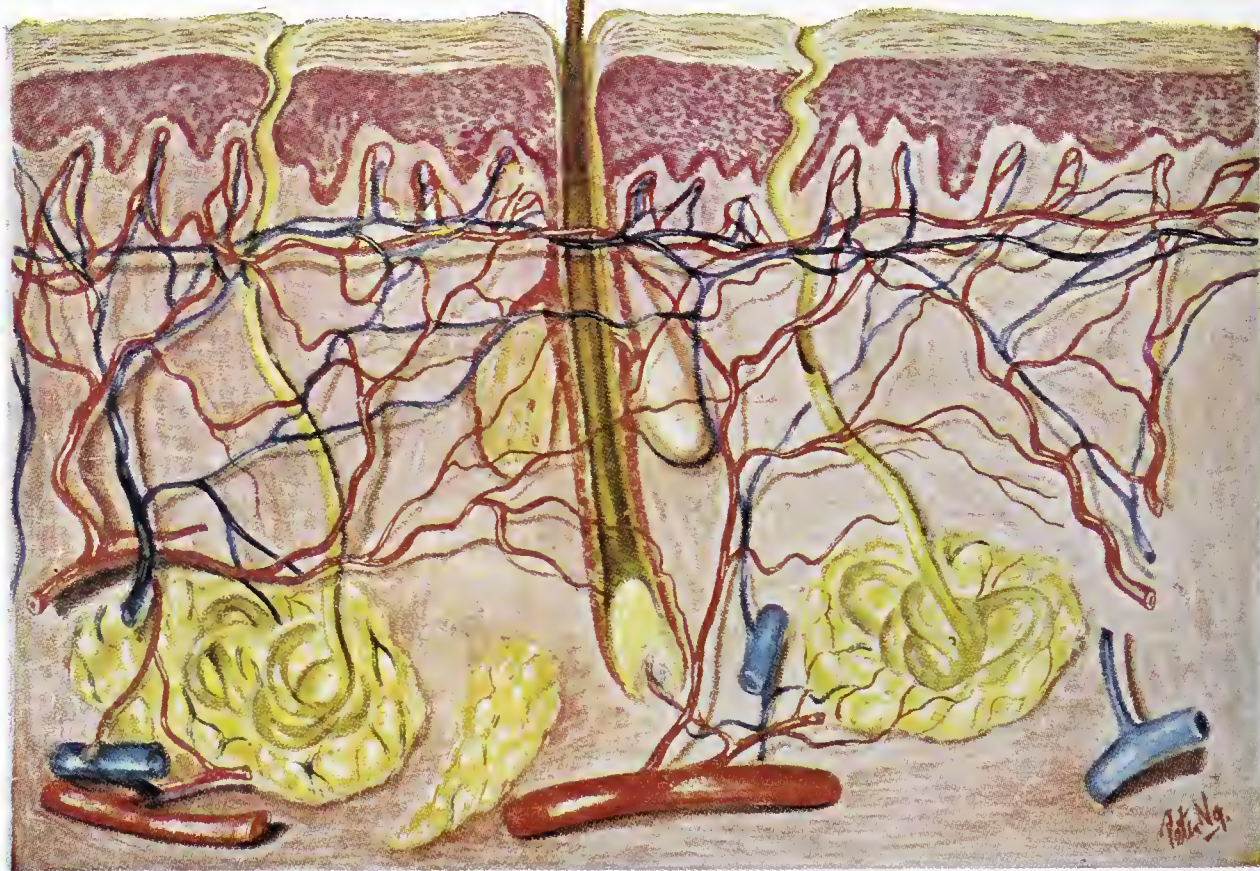
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Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 369.

THE NEW ENGLAND JOURNAL OF MEDICINE
December 4, 1969

(1) TRUE

"Cardiac arrhythmias are common and frequently serious complications of acute myocardial infarction. Among closely monitored patients some disturbance of rate, rhythm or conduction has been detected in as many as 95 per cent, some type of ectopic ventricular impulse formation in 75 per cent, major active ventricular arrhythmias in as many as 50 percent, and ventricular tachycardia or fibrillation in up to 37 per cent. Active arrhythmias of ventricular origin are a major contributing factor or cause of death after acute myocardial infarction. Lowering of the mortality rate from acute myocardial infarction in recent years has been largely achieved by prompt and effective pharmacologic or electric treatment of serious arrhythmias. Unfortunately, in many patients the detection of such arrhythmias and the initiation of emergency therapy may be considerably delayed. Even in coronary-care units serious hemodynamic disturbances may occur in the period between the appearance and the correction of a major arrhythmia. Furthermore, emergency therapy may have undesirable effects on the patient, and correction of an established serious arrhythmia is often difficult and at times impossible. For these reasons an effective and safe therapeutic program for the prevention of serious arrhythmias after acute myocardial infarction can be of great value." (p. 1253, col. 1, para. 2)

(2) FALSE

"On that basis procainamide decreased the fraction of patients with some active ventricular arrhythmia from 90.9 per cent (30 of 33) to 62.2 percent (23 of 37), with ventricular tachycardia from 33.3 percent (11 of 33) to 8.1 per cent (three of 37) and with primary ventricular fibrillation from 6.1 per cent (two of 33) to 0 percent. Only eight of the 22 procainamide-treated patients who showed no active ventricular arrhythmias on entry had some such arrhythmia during the study; the corresponding figures for the control group are 19 of 21." (p. 1255, col. 2, para. 1)

(3) TRUE

"The concentration of procainamide in plasma correlated well with both desired and adverse effects of the drug. In procainamide-treated patients ventricular tachysystolic arrhythmias or frequent ventricular premature beats were observed only at procainamide plasma concentrations below 4 mg and only in two patients at concentrations between 3 and 4 mg. per liter. Such low procainamide plasma concentrations were observed frequently during the first few hours of the study and were probably responsible for the incomplete protection during this period. In seven patients plasma concentration remained between 2 and 4 mg per liter throughout the course of prophylactic therapy. As a group these patients also appeared to have less ventricular arrhythmic activity than the control group, but their number was too small for the difference to achieve statistical significance. Suspected adverse effects of procainamide therapy always occurred at plasma concentrations above 7 mg per liter and were observed in three out of seven patients in whom

such levels were reached. The one death to which procainamide therapy may have contributed occurred at a plasma level of 10.2 mg per liter." (p. 1257, col. 2, para. 4)

EDITOR'S NOTE: We recommend this paper to you in its entirety.

The authors warn that myocardial infarction and ventricular failure may produce arrhythmias that require higher doses of procainamide and other measures. Also this drug does not suppress active atrial arrhythmias.

(4) FALSE

"There were no striking clinical features of the patients in this group (patients over 60) that distinguished them from younger patients with aortic stenosis. The finding of calcification in the aortic valve on plain roentgenograms was associated with severe aortic stenosis in 46 of 47 cases, but there were many in whom it was not seen who had considerable stenosis. Likewise the electrocardiogram provided only suggestive evidence for the presence of marked aortic stenosis. Even in a retrospective fashion it was difficult to distinguish the elderly patient with an innocent systolic murmur from one with serious aortic stenosis. Only catheterization of the left side of the heart permitted this critical distinction. No morbidity due to catheterization was encountered in this elderly group, and the findings of the hemodynamic study were similar to those anticipated in a younger population with aortic stenosis.

"The results of surgery were gratifying in this group, and on that basis, we believe an aggressive approach to the elderly patient with aortic stenosis is warranted with the expectation of an acceptably low mortality rate and good clinical response." (p. 1263, col. 1, para. 2)

(5) TRUE

"After Culbertson et al. discovered that freeliving amebas could produce fatal meningoencephalitis in animals, reports of this disease in human beings were presented, from Australia in 1965 by Fowler and Carter and shortly thereafter from the State of Florida by Butt. Since then, the disease has been reported from Czechoslovakia, Virginia and Texas, and epidemics have occasionally appeared.

"Clinicopathologically, the disease has presented a unique picture. Those affected have been almost always healthy children or young adults; a history of swimming in fresh or brackish water during the week before onset of symptoms has usually been obtained, and spinal-fluid findings have been typical of acute purulent meningitis. The course has been one of rapid deterioration, and despite intensive antibiotic therapy, death has occurred in three to five days. At autopsy, in addition to meningitis, a characteristic hemorrhagic encephalitis has been noted, the olfactory, frontal, temporal and cerebellar regions appearing selectively involved." (p. 1315, col. 1, para. 3)

(6) TRUE

"Although primary amebic meningoencephalitis displays a typical clinical picture the disease has been difficult for the unsuspecting physician to diagnose. Partially treated bacterial meningitis or parameningeal infections, such as a brain abscess or subdural empyema, have usually been the incorrect diagnoses. An important reason for this has probably been that physicians have seldom examined wet preparations of cerebrospinal fluid under high magnification. When they have, amebas still may have been overlooked, since movement may not be detected until

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The Council felt the need for representation on the National AMPAC Board.

ACTION:

It was voted that the Council nominate George H. Mills to the AMPAC Board.

The Council also recommended that Dr. George H. Mills be nominated to the Legislative Council of the AMA.

ACTION:

It was voted that the Council nominate George H. Mills to the AMA Legislative Council.

Progress Report on Malpractice Insurance: Dr. George Goto reported that he spoke with Mr. Clifford Miyoi of the Department of Regulatory Agencies who advised that the HMA is a so-called "fictitious" group and as such it might be contrary to the law if it went into group malpractice insurance.

Dr. Chinn reported that he spoke with a Mr. George Oda of First Insurance Company about malpractice insurance.

The President asked that Dr. Chinn follow through.

REPLIES TO COUNCIL CORRESPONDENCE

Reply from HMSA re Workmen's Compensation: The letter was circulated, reviewed and noted.

Dr. Tomita reported that he met with Mr. Hasegawa of the Department of Labor, Mr. Battisto of Straub Clinic, Senator Yoshinaga, and representatives of the Board of Underwriters. At that meeting, Mr. Hasegawa asked Senator Yoshinaga to keep the bill which he introduced in the committee because he would be able to work under the present law. Dr. Tomita reported that he objected to that portion of the law which says the Director shall hold a public hearing from time to time. Mr. Hasegawa states that he can work under the "prevailing" fee and is upset about the words "usual and customary." Mr. Hasegawa informed those at the meeting that he plans to hold a public hearing the first week of May. He also stated that he will go to the neighbor islands, and that by the end of August he will be able to formulate or promulgate a fee schedule. Dr. Tomita reported that Mr. Hasegawa and the underwriters agree that the conversion factor is no longer 5.0. Dr. Tomita stated that he pointed out that he would like to see mandatory review on an annual basis and attached to the cost of living index. Mr. Hasegawa said that they will meet again at his call.

Reply from DSS re increase in fee schedule: The letter was circulated, and reviewed. There was considerable discussion about the DSS and its fee schedule. Many suggestions were discussed in detail.

ACTION:

It was voted that the Council recommend that the Commission on Medical Services explore with the DSS the delivery of medical services to their clients at the usual and customary fee under a foundation plan insured with an insurance carrier.

Reply from Honolulu County Medical Society re involving medical students and house staff: The letter was circulated, reviewed, and noted. No action was necessary.

Reply from AMA re cytology laboratory advertising: At the last Council meeting, the Council was asked to set a policy relative to acceptance of advertising from out-of-state laboratories. At that time, the Council referred the letter to the AMA Council.

The reply from the AMA stated that the HAWAII MEDICAL JOURNAL write to the California Department of Public Health requesting information about whether or

not the laboratory in question is licensed and if it has complied with the applicable licensing law and regulations in regard to the advertising copy submitted.

ACTION:

It was voted to write a letter to the California Department of Public Health requesting the above information.

NEW REQUESTS FROM COMMITTEES AND COMMISSIONS

Public Relations Committee request for review of proposed opinion survey: A sample of an opinion survey of the HMA membership was circulated to the Council for approval. The survey as presented was discussed thoroughly.

ACTION:

It was voted to postpone the circulation of the survey until information can be obtained from the chairman of the PR committee in regard to its value.

REQUESTS FROM OUTSIDE ORGANIZATIONS FOR FUNDS

Catholic Herald request for advertising in its Christmas edition: The Council was apprised of the type of advertising that went into the Catholic Herald and a rate schedule was circulated to each member.

ACTION:

It was voted not to purchase advertising space in the Catholic Herald.

University of Hawaii request for funds for externships: The letter was circulated, reviewed and discussed. The letter asked if the HMA could support three \$1000 externships on an annual basis. It was pointed out in the discussion that there are no funds budgeted.

ACTION:

It was voted that the President of the HMA answer the letter appropriately informing the University of Hawaii School of Public Health that the HMA has no funds available.

SECRETARY'S REPORT

The Secretary presented the following recommendations to be acted upon by the Council:

1. That members who have paid only part of their total combined state, county, and national dues be declared delinquent and not in good standing.

ACTION:

It was voted to accept recommendation No. 1. There was one dissenting vote.

2. That the usual delinquency letters be sent to all members whose full dues have not been received from their respective county societies by April 21.

ACTION:

It was voted to accept recommendation No. 2.

3. That if the dues from these members have not been received within 30 days from the date the letter is sent, that a registered letter be sent to the delinquent member with a copy to the appropriate county society secretary advising that they have been dropped from membership in their county society, the HMA, and that this information has been transmitted to the AMA.

The Council was circulated a list of those physicians whose dues are delinquent. It was felt that it is not the

business of the HMA to tell the county society to drop its member if his dues are delinquent.

ACTION:

It was voted to accept recommendation No. 3 with the deletion of the words "their county society."

4. That all roster changes reported by the county societies for the months of January and February be accepted and approved. It was pointed out by the Maui Councillor that two individuals listed no longer practice in Maui County and therefore are not on the roster. The Maui Councillor was advised that this information was not transmitted to the HMA. The Maui Councillor was advised that in order for these individuals to belong to the county society, they have to live and practice in the county.

ACTION:

It was voted to accept recommendation No. 4.

TREASURER'S REPORT

The Treasurer reported that it was not possible to reconcile one of the HAMPAC checking accounts after Mr. Godfrey's departure and so the balance on the bank statement was used as the base for reconciling future statements. Also it was found that dues for one member from Maui were not transmitted to AMPAC. In addition, duplicate dues for three HAMPAC members from Maui were received which have not yet been resolved.

After some discussion on the above matter, it was suggested that because HAMPAC is a separate arm of the HMA it should not be included in the Treasurer's report but that it be referred to the HAMPAC Board to be resolved.

ACTION:

It was voted to delete this portion from the Treasurer's Report, refer it to the HAMPAC Board, and the HAMPAC Board asked to submit the results of its actions to the Council.

There was discussion about the \$226.75 still owing from the Mid-Pacific Press on the contract to print the 1968 Roster. This account receivable is not reflected in the accounts.

ACTION:

It was voted to assign the above account to the Bureau of Medical Economics for collection. There was one dissenting vote.

There was some discussion on the Health Careers Day project. It was felt that the annual report of the Careers Committee should be worded in such a manner so as not to show that the HMA derived any income from this project. As it is written up in the report, it shows that the HMA profited from the project when in actuality it did not.

ACTION:

It was voted to recommend to Dr. Noyes that his annual report of the Careers Committee be corrected.

There was considerable discussion about the status of the Roster and the HAWAII MEDICAL JOURNAL incomes. It was felt that some definite study should be made and some clear-cut recommendations made to the House of Delegates. Dr. Mills stated that the Delegates should be made aware of (1) why the costs are going up, (2) why HMA is under figure billed by Star-Bulletin Printing

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Company for the roster, (3) what happened, (4) whether HMA anticipates this happening again, (5) whether this is a trend, (6) what benefits are derived from the JOURNAL and Roster, etc.

The President asked that the Finance Committee prepare something for discussion at the House of Delegates.

There was discussion of annual physical examinations for HMA employees. It was suggested to explore the possibility of utilizing the multiphasic-type screening physical examinations with the employees. There was some concern about directing the employee to any one physician or facility to have their physical examinations.

ACTION:

It was voted to ask the Personnel Team to set up guidelines for the type of physical examinations the HMA employees should have and that they indicate whether or not the employee should have free choice of physician, and to set a limit to amount to be paid for physical examinations.

There was discussion about budgeting for two people instead of three people, to attend the AMA Clinical Session. It was suggested that the Delegate or his alternate and the Executive Director or an alternate be sent to the Clinical Session of the AMA.

ACTION:

It was voted that the HMA budget for two people to attend the AMA Clinical Session, i.e. the Delegate or his alternate and the Executive Director or an alternate.

There was discussion about unexpected mainland trips not included in the HMA budget. It was noted that from time to time, meetings come up which the HMA finds it is imperative that someone attend and it has no money allocated for such an expense. It was suggested that a certain amount be included in the budget for unexpected mainland trips.

ACTION:

It was voted that \$3000 be included in the budget for unexpected mainland trips and that these trips are to be authorized by the Council.

It was noted in the Treasurer's report that the allocation for the Legislative Counsel is unchanged. There was considerable discussion about this allocation for a Legislative Counsel and it was pointed out that the Council could not make any recommendation for change in this regard. If any recommendations are to be made it will have to appear in the Legislative Committee's report or in the Commission on Legislation's report.

ACTION:

It was voted to budget the \$6000 for legislative counsel or staff depending upon the advice of the Legislative Committee chairman or the Chairman of the Commission on Legislation.

Woman's Auxiliary to the HMA Budget: Mrs. Moran presented the budget of the Woman's Auxiliary which showed that in a couple of years they will be dipping into their reserves. She asked for advice on how to resolve their problem. Mrs. Moran offered one suggestion; i.e. not have the Woman's Auxiliary charged for clerical work.

ACTION:

It was voted to increase the dues of the Woman's Auxiliary to the HMA from \$6.00 to \$8.00.

The Treasurer had the following recommendations and they were acted upon as follows:

1. That the proposed budget be approved, as amended.

ACTION:

It was voted to accept recommendation No. 1.

2. That the dues for the calendar year 1971 be set after a decision is made on the proposed merger.

ACTION:

It was voted to accept recommendation No. 2.

3. That Leong and Leong, our present auditors, be retained.

It was voted to accept recommendation No. 3.

Report of Peat, Marwick & Mitchell: It was reported that the Peat, Marwick & Mitchell Report was accepted by the Council at its last meeting. One of the recommendations made by PMM was that there be an Executive Secretary and an Assistant Executive Secretary. The position of the Assistant Executive Secretary was offered to Miss Lee McCaslin who did not accept the offer. The Council is asked to accept the termination of Miss Lee McCaslin's employment.

ACTION:

It was voted that the Council accept Miss McCaslin's wish not to accept the offered position, which would mean her termination as of this date, April 3, 1970.

**REPORT FROM THE PRESIDENT
ON MERGER ACTIVITIES**

The President reported that the officers of the HMA, the officers of the HCMS, Mr. Tom Rice and Mr. H. Tom Thorson met to discuss the overlapping of activities and the possibility or feasibility and practicality of carrying out some of the recommendations that were included in the reports of Peat, Marwick & Mitchell. It was the consensus of the officers gathered that a course should be pursued that would involve some of the recommendations and merging those particular areas where it could be done. Another meeting was held and the possibilities of such a merger was discussed in depth. At that time, it was apparent to the officers that merger could be accomplished and hopefully give the HMA and the county medical societies better service. Another meeting was held at which time presidents of the neighbor island counties were invited to attend to discuss this matter. The pros and cons were weighed and the pros seemed to be favorable. None of the people who have been involved in these discussions have made any commitments except to say that it looks like a good idea. It was felt that this must be explored further, which may take six months or longer. In order to increase efficiency, everyone realizes that all these organizations have to be under one roof. It was pointed out that the HCMS is not obligated to the Mabel Smyth Building; however, the HMA is obligated to keep up the maintenance of Mabel Smyth Building. Mr. Rice reported that there is no reason why the HMA could not rent out its space to an organization dealing in medical matters. The building must be used for medical purposes.

It was reported that the county presidents go back to their membership and present this matter for discussion so that by the time of the House of Delegates meeting they will be thoroughly informed.

Dr. Lowrey added that the officers of the HCMS have generously made Mr. Thorson available to the HMA in the interim until something can be resolved in regard to a merger. Mr. Rice was asked if the Council would be acting in contrary to the Bylaws by accepting the philosophy of a merger of administrative staff and by accepting the offer of the HCMS to utilize the services of

Mr. Thorson. Mr. Rice reported that the power of hiring and firing (as written in the present Bylaws) rests with the Council and it is within the purview of the Council to contract out services.

The Council was asked to accept this administrative merger in principle. Dr. Batten stated that he could not act on this matter until he has been given the opportunity to read the report of the HCMS. Dr. Iaconetti felt that before any definite action is taken, other than in principle, it would behoove the neighbor island county societies to discuss this matter further. It was suggested that the HCMS's report be circulated to the members of the HMA Council.

ACTION:

It was voted to appoint Mr. H. Tom Thorson as interim temporary Executive Secretary pending ratification by the House of Delegates and all county medical societies.

ACTION:

It was voted that the Council approve the idea of an administrative merger in principle.

It was noted that the Council has only approved the administrative merger in principle and that this matter will be thoroughly discussed at the House of Delegates at which time a definite decision will be made.

The President asked in what manner such a report should be presented to the House of Delegates. It was suggested that a summary of these reports be made available to the House of Delegates to approve the concept. It was noted that the HMA and the HCMS has a Reorganization Committee and the President asked that both chairmen and the chairman of the ad hoc Search Committee get together to prepare a more specific report for a special House of Delegates meeting.

ADJOURNMENT

The meeting adjourned at 11:30 P.M. ■

In Memoriam continued from 386

plays went to the Red Cross. His "notices" were invariably good, and he seemed to excel in humorous roles. In March, 1919, Dr. Woodbury left the Islands and located in San Francisco where he practiced for two years and then returned to the East and established a practice in Boston. He was a trustee and a member of the staff of the Hahnemann Hospital, Boston, and in 1947 was elected president of the International Hahnemann Institute, Washington, D.C. He also gave many lectures on homeopathy at Boston University and at postgraduate sessions of the American Foundation of Homeopathy.

Dr. Woodbury died on January 22, 1948, in Boston at the age of 65.

The doctor was the author of *Materia Medica for Nurses*, published in 1922, and of many articles in medical journals in England, India, and the United States. Dr. Woodbury was also a writer of plays and poetry. During his years in Honolulu three of his poems appeared in the *Paradise of the Pacific* magazine: "Easter" (May, 1917),

"Queen Liliuokalani" (January, 1918), and "In the Trenches" (August, 1918). In addition he composed "Ode to Salem" published for the Terecentenary of Salem, Massachusetts; "War Sonnets" (1918); a dramatic arrangement of Browning's "Paracelsus," which was accepted by Baylor University; and "Rivernmouth," a play of old Portsmouth, New Hampshire, used as a pageant.

The doctor was a member of the Thoreau Society, Henry George School for Social Science, Eugene Field Society, British Homeopathic Society, Medical Library of Boston, Old Planters Society of Salem, and the Historical Society of Harvard. He was an honorary member of the Los Angeles and Boston Browning societies and of the Los Angeles and Boston Dickens societies. He belonged to the Unitarian Church.

Hyuk Chong Liu

Hyuk Chong Liu was born in Honolulu on March 13, 1893, the son of Chung Sing Liu and Ngit Lan Ho.

He attended normal school and the Mid-Pacific Institute in Honolulu. Following which he worked a year for the Inter-Island Steamship Company and for Bishop Bank of Honolulu for the next two years.

In 1915 he went to California and attended Pacific Union College at Angwin. He next attended the Medical Evangelist College at Loma Linda, California, which granted him his M.D. in 1922. Dr. Liu taught at the college for one year before returning to Honolulu and entering private practice.

Dr. Liu was a former City-County physician and surgeon. In addition to his practice he was milk inspector for several large Honolulu dairies.

Dr. Liu was married and had five children: Myrtle, Pauline, Cora, Mary, and Jonathan.

His hobby was raising prize poultry. He also played the violin for his own enjoyment.

Dr. Liu died September 23, 1940, in Honolulu at the age of 47.

Ikuo Yoshimura

Dr. Ikuo Yoshimura came from the village of Sakashita mura, Ena gun, Gifu Prefecture, Japan. He came to Hawaii in 1923.

He worked with his brother, Dr. Eiji Yoshimura, who practiced in Hilo, Hawaii. Later he became director of the Kohala Japanese Hospital in Hawaii.

Dr. Yoshimura returned to Japan and practiced in Kamakura, Japan. He died in 1936. ■

the slide has been warmed. However, in every case in which the diagnosis was made before death, amebas have been seen in wet preparations of cerebrospinal fluid.

"The onset of the disease has been abrupt. Severe headache, nausea, vomiting, abulia, malaise and fever have been prominent. Males have been principally affected. Except in one case all patients have previously been healthy, and between the ages of eight and 27 years. After admission to a hospital, coma has developed rapidly, and death has ensued in 24 to 48 hours." (p. 1321, col. 1, para. 7)

EDITOR'S NOTE: That wasn't a very astute question and I am the one to blame for it. It was really included to again remind the reader of the symptoms of a disease that may not be entirely a rarity.

THE NEW ENGLAND JOURNAL OF MEDICINE
December 11, 1969

(7) TRUE

"In a double-blind crossover trial in patients with asthma, similar initial bronchodilator activity was achieved with inhalations of salbutamol (100 ug), a new beta-adrenergic receptor-stimulating drug, and isoproterenol (500 ug), but the duration of action was longer with salbutamol. Heart rate did not increase with salbutamol but showed a small rise with isoproterenol.

"Normal subjects were given five times this dose of each drug. Salbutamol produced a small mean increase in heart rate (4 beats a minute) and no palpitation, whereas isoproterenol produced a large mean increase in heart rate (33 beats a minute) and pronounced palpitation.

"For comparable bronchodilator activity salbutamol appears to cause much less cardiovascular betareceptor stimulation than isoproterenol, and it may prove to be more useful in the treatment of asthma." (p. 1323, [Abstract])

EDITOR'S NOTE: Salbutamol is under study in the U. S. but not available on the market. (This paper came from England.)

(8) TRUE

"Papaverine, which belongs to the benzyloisoquinoline group of drugs, has a relaxing effect on smooth muscles, particularly those in the blood vessels and to a smaller extent those in the intestinal tract. It has therefore been extensively employed in the treatment of disturbances of the cardiac and cerebral circulation. At present the most important indication for its use is in cases of acute pulmonary and peripheral embolism.

"On oral administration of even very large doses (1000 mg.) side effects are minimal, but headache, nausea and vomiting have been observed. Toxic side effects are almost exclusively seen after intravenous administration; cardiac arrhythmias and other electrocardiographic changes have been described. In general, however, papaverine is considered to be of very low toxicity and hepatotoxicity has not previously been described." (p. 1333, col. 1, para. 2)

(9) TRUE

"After having observed the first case of a hepatic disorder associated with papaverine therapy, we closely followed the liver-function tests of all patients treated with papaverine. In three of the 15 patients who were followed for more than a month, we found evidence of liver damage. It is surprising that this symptom complex has not previously been described, probably because

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papaverine, which was introduced clinically at a time when enzymatic tests were not available, has long been considered to be a nontoxic drug. Also, the hepatic disorder appears to be completely reversible on withdrawal of the drug, and in any case the accompanying dyspeptic symptoms as seen in our patients would have been an indication for stopping treatment. Finally, jaundice is not very pronounced, and the tendency to use the drug in the treatment of patients with arteriosclerotic vascular lesions or embolic conditions, in which transitory elevation of transaminases and alkaline phosphatase is not rare, causes no surprise when moderate derangements of liver function are observed." (p. 1335, col. 2, para. 2)

Publication aided by a grant from the Smith Kline & French Foundation and The Upjohn Company ■

Book Reviews continued from 387

★Frontiers of Pulmonary Radiology

Edited by Morris Simon, M.D., E. James Potchen, M.D., and Marjorie Le May, M.D., 424 pp., \$34.50, Grune & Stratton, 1969.

THE FIRST SECTIONS are concerned with the newer concepts of the distal airway anatomy, function, and relationship to pulmonary pathology and dynamics and its radiological reflections. This includes angiography and perfusion. There is finite coverage of detail and summaries of these portions are essentially nonexistent. Hence those interested in only the periphery of any one portion find it difficult to merely peruse the presentations. For those familiar with and interested in pulmonary physiology and disease, it is similarly difficult reading,

plowing through old detail, looking for a new "pearl," though pearls are there. For those who have not kept up with recent advances, it is an excellent review.

The remaining sections, covering alveolar, vascular, and miscellaneous groups of pathology, are well done and especially well illustrated. No one reader will agree with every detail, but generally, he will find these presentations to be quite complete.

The book is well worth close attention by radiologists, those in nuclear medicine involved with lung perfusion, and pulmonary angiographers and pulmonologists. Portions chosen for detailed reading will vary for each but all will find this a good presentation. It is a field that must be mastered by reading, as very few physicians have sufficient experience or cases for self-evaluation.

GEORGE W. HENRY, M.D.

Neurology in Pediatrics

By Patrick F. Bray, M.D., 514 pp., \$23.50, Year Book Medical Publishers, Inc., 1969.

THIS BOOK is well organized and well researched, and up to date, with a fair amount of discussion on language disorders and visual and hearing deficits, lacking in other textbooks. Some other innovations are very helpful to the pediatrician, such as discussions on abnormal head size and proptosis, as well as a chapter on neurological syndromes and laboratory abnormalities. There is too much philosophical dialogue in certain areas, and questionable division of categories, such as learning disabilities from language disorders, and there is controversy in the categorization of the demyelinating diseases. But this is a reflection of the changing theories and differing of opinion among neurologists. There are some important omissions, especially for pediatricians, such as in the discussion of the cerebrospinal fluid (the importance of the dynamics, and contraindications, are not mentioned).

In general, this is an excellent textbook in the field and it should be in the physician's reference library.

R. M. YAMAOKA, M.D.

Handbook of Ocular Therapeutics and Pharmacology, 3rd Ed.

By Philip P. Ellis, M.D., and Donn L. Smith, M.D., Ph.D., 251 pp., \$10.75, the C. V. Mosby Company, 1969.

THIS HANDBOOK will find its best use as a quick and easy reference on ocular therapeutics. The book is divided into two sections: therapeutics and pharmacology. In the first section, the descriptions of ocular diseases are rather short, but complete in the subjects covered. In the second section, a compilation of ocular pharmacology is listed. Most of the information in pharmacology can be obtained from the Physician's Desk Reference. This hand-

book would be useful for nurses on the eye service and medical students being exposed to ophthalmology for the first time.

WAYNE WONG, M.D.

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County Society News

Hawaii

Dr. Robert J. Bolt, Professor and Chairman of the Department of Medicine of the University of California at Davis, spoke on the "Medical Treatment of Cholecystitis" at the March 20 meeting. During the business portion one new member was unanimously approved, Egbert H. Fell. It was voted to review the film "A Storm—A Strife" and invite the RN's and LPN's to the meeting. The Department of Health's rubella immunization project was endorsed. Information was received that the Society is looking into the possibility of establishing its own collection agency. It was voted to advise the Board of Medical Examiners that a locum tenens is needed for Dr. Verne Adams at Pahala. The idea of holding a meeting in the Honokaa and Kona districts will be explored, as will the possibility of including in the dues structure funds for dinner meetings. The Secretary was asked to obtain information on the Hawaii Medical Library.

Maui

The Society's 1970 committees were approved at the February 17 meeting. The president advised that the Thoracic Society announced the availability of Dr. John Murray to lecture on pulmonary physiology in May. The HMA president advised that the HMA is considering coordination of peer review programs. A progress report on the diabetic survey noted that there were 1,252 participants and 62 positives were positive by Dextrostix, 58 by autoanalyzer (of which less than half responded) and 13 were borderline or positive diabetic by the glucose tolerance test. Seven students from Maui will be sent to Honolulu for Careers Day and the Society will look into the possibility of conducting a Careers Day on Maui. Dr. Iaconetti reported on the HMA's Council meeting. Consideration of establishing an inactive membership was tabled until a future meeting. ■

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★Symposium on Cancer of the Head and Neck, Vol. 2

Editor John C. Gaisford, M.D., 381 pp., \$31.50, The C. V. Mosby Company, 1969.

WITH INCREASING AGGRESSIVENESS in the surgical management of head and neck cancer, the problem of total management and reconstructive rehabilitation becomes foremost to the surgical oncologist. This monograph, the result of a symposium sponsored by the American Society of Plastic and Reconstructive Surgeons, presents the latest advances in the surgical approach to head and neck cancer, both ablative and reconstructive, and particular emphasis on immediate and prompt reconstruction following surgically removed parts. It represents authoritative experience derived from outstanding surgeons throughout the country. In addition to the formal papers, accompanying round table discussions add further knowledge to a most thorough compendium. It is an excellent reference for the head and neck surgeon.

EDWARD L. S. JIM, M.D.

★Cardiovascular Surgery: Current Practice, Volume 1

Edited by Thomas H. Burford, M.D., and Thomas B. Ferguson, M.D., 273 pp., \$18.00, C. V. Mosby Company, 1969.

THIS VOLUME IS A CONCISE presentation of general principles in current cardiac surgery. It contains a broad historical background for the practice of cardiovascular surgery. Although fundamental concepts are covered extensively, there are also many finer details related to this type of surgery which afford interesting reading for both readers who are involved in this subject and those who are not. The authors themselves do not have any presentation in this book, and the different subjects are written by experts in those particular fields. This volume is most valuable in presenting the fundamental concepts related to cardiovascular surgery.

RICHARD MAMIYA, M.D.

Neurobiological Aspects of Psychopathology

Edited by Joseph Zubin, Ph.D., and Charles Shagass, M.D., 429 pp., \$18.75, Grune & Stratton, 1969.

THIS VOLUME, constituting the proceedings of the 58th annual meeting of the American Psychopathological Association, held in New York City, February, 1968, reviews many important areas of research in neurobiology, from EEG correlates of psychopathology to discussions of possible pathologic immune mechanisms in schizophrenia.

One of the most thoughtful papers presented was *Perceptual Aspects of Psychopathology*. Dr. Holtzman correctly points out that "sensory, cognitive, perception, connotative affective and motor processes are linked with each other in any perceptual act." He goes on to advance the thesis that since perception is not a simple sensory act, then we must look to possible feedback mechanisms and association phenomena to understand some of the data which show some psychotic patients as having sensory thresholds different from normals. Jonathan Cole discusses some of the disappointments he has had in that psychopharmacology has not materially improved our understanding of the possible biochemical basis of psychopathology. All in all, the book reminds us that psychobiology is still "a fact-rich but theory-poor field" and the discipline is still in the data-gathering and technique-perfecting stage of development.

K. Y. LUM, M.D.

★Guide to Clinical Laboratory Diagnosis

By John A. Koepke, M.D., 310 pp., \$6.75, Appleton-Century-Crofts, 1969.

THIS PAPERBACK HANDBOOK is essentially directed to the clinician. The format utilizes symptomatology or disease states for chapter headings and introduces each chapter with a brief clinically oriented discussion of the pathophysiology. Laboratory tests are then discussed according to their value as either a screening or a definitive type of examination for the condition under discussion. The technical aspects of the tests are subordinated to their clinical usefulness.

The opening chapter gives a good general review of how to interpret laboratory data, and the concluding chapter deals with a more technically detailed outline for performing basic uncomplicated tests in a small or office-type laboratory. Although some differences of opinion may exist in the choice or preference of the laboratory tests presented, these are minor considerations. The book would appear to be a very worthwhile review for clinicians, including interns and residents, and would also be a good clinically oriented review for pathologists.

ANN B. CATTS, M.D.

★Diagnosis and Treatment of Multiple Myeloma

By Jan Waldenström, M.D., pp. 230, illus., \$15.00, Grune & Stratton, 1970.

WALDENSTRÖM has compiled a vast amount of information on multiple myeloma into a very compact book. He includes many clinical cases of his own to illustrate certain instructive points. Much of the newer studies and data on multiple myeloma have been incorporated into this book. Dr. Waldenström is an authority on plasma protein abnormalities and is well able to evaluate the numerous newer immunologic studies in this fascinating field. Those who were able to hear Dr. Waldenström lecture during his visit to Honolulu in the summer of 1966 can now appreciate in greater detail his vast knowledge and experience in this disease.

ROBERT T. S. JIM, M.D.

★Progress in Community Mental Health, Vol. I

Edited by Leopold Bellak, M.D., and Harvey H. Bartten, M.D., 272 pp., \$11.75, Grune & Stratton, 1969.

THIS VOLUME, a multi-author survey, is intended as the first of a series if it is well received—sort of a "year book" of progress, only published every other year or so. To this reader it indeed seemed worthwhile, and although intended primarily for the specialist in community psychiatry, it can be recommended not only to the general psychiatrist, but to social or public health oriented nonpsychiatrists as well.

The various sections are well chosen and written by knowledgeable and articulate experts. Most important or difficult areas in the field of community psychiatry are covered, with special emphasis on new trends and innovative techniques. The last article by co-author Leopold Bellak is especially bold and provocative in its call for new social approaches to the problems posed by mental illness.

The main adverse criticism, in the opinion of this reviewer, was some tendency toward broad generalization, perhaps unavoidable, and the skirting of troublesome issues by some writers. Details regarding the administration of sample centers and the difficulties attendant upon attempts to cross traditional lines of authority were also rather scarce.

In summary, however, it is a book to be read by anyone interested in broadening his grasp of community psychiatric practice as it is currently emerging on the American scene.

CHARLES W. STEWART, JR., M.D.

★Leukemia and Lymphoma

Edited by James F. Holland, M.D., Peter A. Miescher, M.D., and Ernst R. Jaffe, M.D., pp. 185, \$12.75, Grune & Stratton, 1970(?).

WHILE THE CURE for leukemia is yet to be found, the outlook has improved considerably in recent years. A tremendous amount of study, especially on combination chemotherapy, has been collected and reviewed in this book. The subject is divided into the acute and chronic leukemias and the lymphomas. The genetic, clinical, epidemiologic, and cytochemical aspects of leukemia are also reviewed. This book should be of great interest to the clinician who has to manage and treat leukemia and lymphoma patients.

ROBERT T. S. JIM, M.D.

Progress in Neurology and Psychiatry (Annual Review, Volume 24)

Edited by E. A. Spiegel, M.D., Dr. med. (Hon.) 541 pp., \$24.75, Grune & Stratton, 1969.

THIS STANDARD WORK SERVES a usual useful purpose in summing up important recent work in the fields of neurology and psychiatry. It is reliable as a ready reference for anyone wanting a quick rundown on some of the more important papers published in the areas during the year.

KWONG YEN LUM, M.D.

Psychophysiology of Respiration in Health and Disease

By Donald L. Dudley, M.D., 342 pp., \$12.75, Appleton-Century-Crofts, 1969.

THE AMBITIOUS TITLE of this book indicates that the psychophysiology of respiration in both health and disease will be presented in one compact volume. Unfortunately, the field is so vast and diffuse that the book fails in its dual goal. Lung physiologists and pathologists would undoubtedly quarrel with the meager amount of information presented in their respective fields, and rightly so, I believe. The combined chapter on anatomy and physiology does not provide enough basic science information for the internist or lung specialist; it is adequate for the psychiatric resident or general psychiatrist who sees a good deal of lung problems in conjunction with the internist.

The work of Alexander and French in the early thirties at Michael Reese Hospital on bronchial asthma is given very short shrift. There is a nice chapter on other historical highlights, however, which reviews the treatment of respiratory ailments in a number of Asian countries at various times in history. Another good chapter is that on the catecholamines and their effect on bronchial disease. The use of hypnosis in experimentally induced respiratory obstructive disease and a long chapter on its use in the psychotherapy of these ailments was enlightening.

The cost of the book seems prohibitive to me as it is most likely to be read by the psychiatric resident, who is least likely to be able to afford it.

FREDERICK E. POPE, M.D.

The Therapeutic Play Group

By Mortimer Schiffer, 214 pp., \$8.75, Grune & Stratton, 1969.

THIS BOOK REPRESENTS the long experience of the author as a consultant in special group processes to the Bureau of Educational and Vocational Guidance of the Board of Education of the city of New York. The work is especially relevant in view of the fact that the therapeutic play group can be a useful resource, within a school system, for emotionally disturbed children.

KWONG YEN LUM, M.D.

Cancer of the Digestive Tract: Clinical Management

Editors: Tilden C. Everson, and Warren H. Cole, 380 pp., \$18.50, Appleton-Century-Crofts, 1969.

IN THIS CONCISE, authoritative presentation, the contents are divided appropriately, and each chapter is written by an established investigator. The biliary system is included, and diagnosis and treatment are emphasized. The last two chapters are devoted to radiotherapy and chemotherapy. The illustrations are excellent and so are the references. Although many have contributed to this volume, the style is consistent.

FRANCIS ODA, M.D.

Also Received

Medicine and Stamps

Edited by R. A. Kyle, M.D., and M.A. Shapiro, Ph.D., pp. 216, illus., \$1.00, American Medical Association, 1970.

THIS TEXT should excite all you philatelists since it is a bargain for one dollar. It is illustrated and presented as a service by the AMA.

Current Procedural Terminology, 2nd Edition

Edited by Burgess L. Gordon, M.D., William R. Barclay, M.D., and Charlotte Fanta, B.S., pp. 368, \$2.00, American Medical Association, 1970.

THIS SECOND EDITION, using a 5-digit coding system, is the recommended coding system for procedural terminology. It considers the California Relative Value Studies and allows for addition of new terms. This booklet is recommended for office personnel in coding all the procedures done in the office. ■

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An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain¹⁻³ leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates¹ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain and the United States have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should in-

clude special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives.

The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T⁴ uptake values; metyrapone test and pregnanediol determination.

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slurred speech, tremor, vertigo,
urinary retention, blurred vision.
Paradoxical reactions such as acute
hyperexcited states, anxiety, halluci-
nations, increased muscle spasticity,
insomnia, rage, sleep disturbances,
stimulation, have been reported;
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drug. Isolated reports of neutropenia,
jaundice; periodic blood counts and
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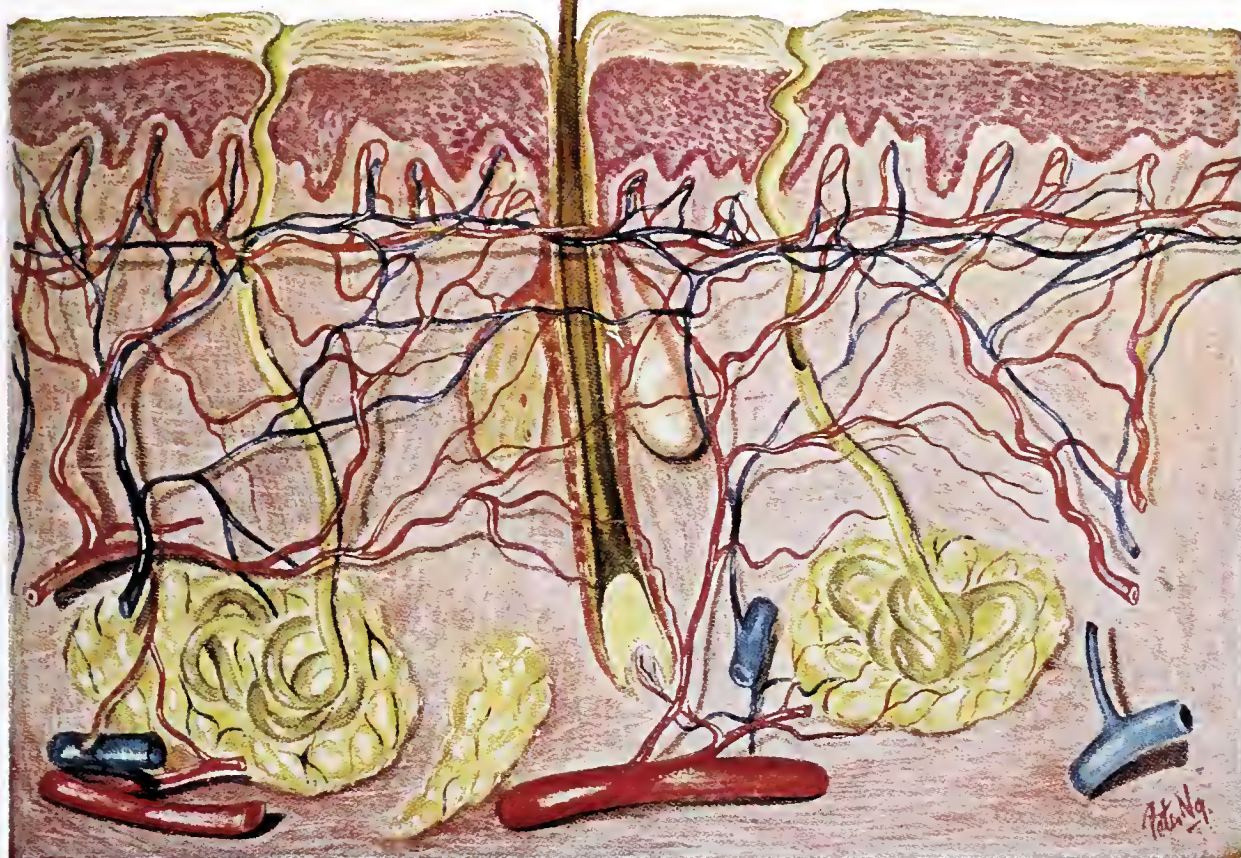
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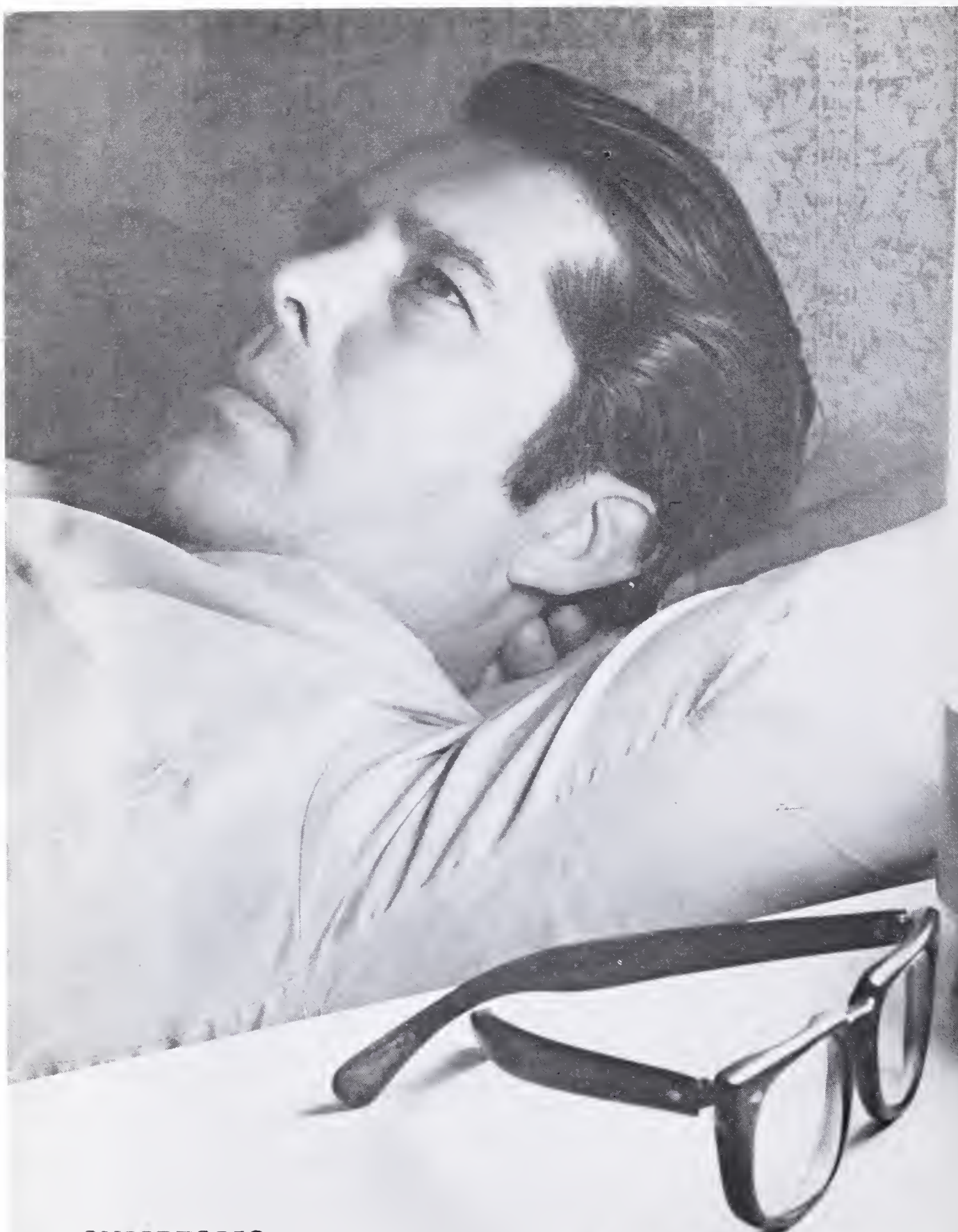
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Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery

Side Effects include drowsiness, usually transient, if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine,

mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand

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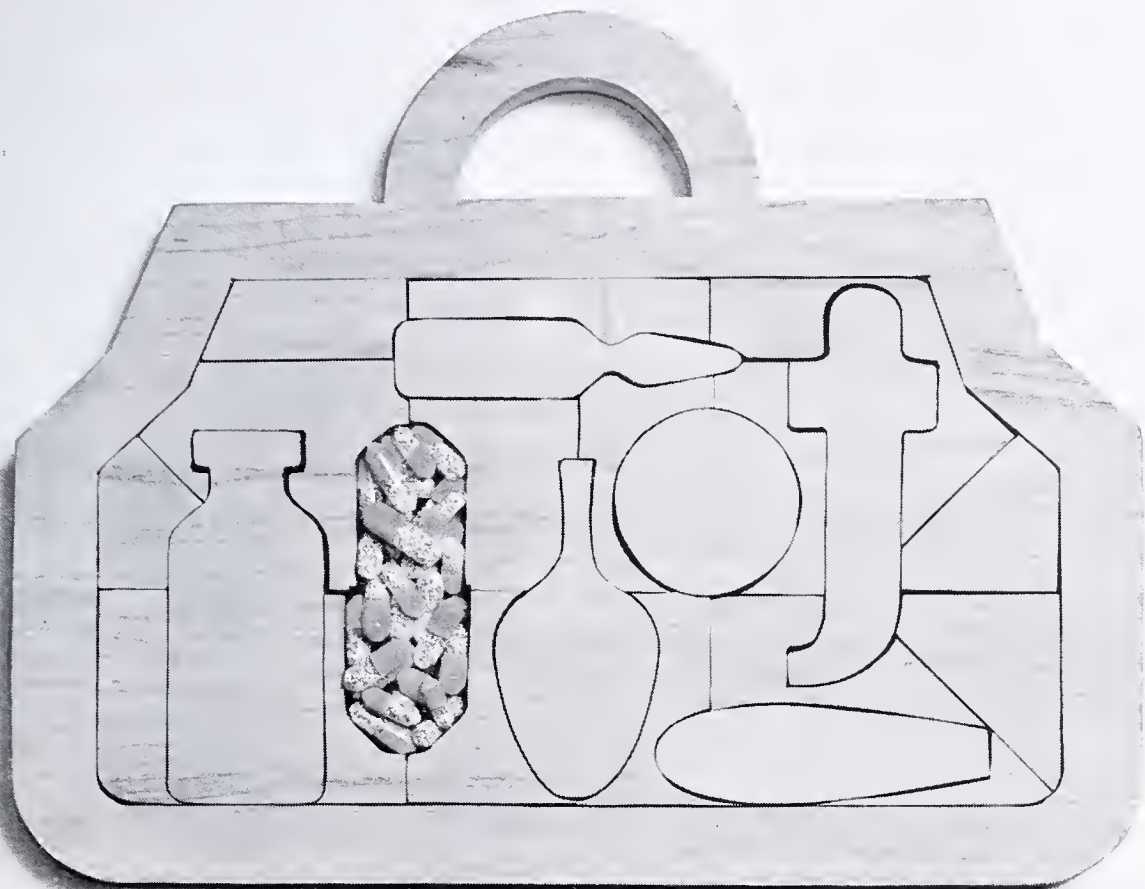
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Leprosy in Hawaii

JOSEPH C. HATHAWAY, M.S., M.D., *Honolulu*

● *For many years, it has been a requirement for a medical license in Hawaii that all physicians take an "orientation course" in leprosy. For over four years, it has been one of my duties to give this course, consisting of a lecture, slide demonstrations, and presenting patients, at Hale Mohalu Hospital, the State facility for leprosy in Pearl City. Several times, requests have been made to me to publish this lecture, as it contains the practical knowledge that is useful to know about this disease, and answers many of the questions that have been asked by physicians who have attended. It is in no way more than an attempt to outline the basic facts of leprosy.*

THE CAUSE of leprosy is *Mycobacterium leprae*, discovered in 1874 by G. Armauer Hansen of Norway; it was one of the first microorganisms described as the cause of a disease. Under the microscope it closely resembles *M. tuberculosis*, and takes the same stains, the most useful one being the well known Ziehl-Neelsen acid fast stain. In other ways the two diseases are quite dissimilar, tuberculosis affecting chiefly the lungs and leprosy affecting chiefly the skin and superficial nerves. Also, tubercle bacilli can be grown on laboratory media fairly quickly, and can also be grown easily in laboratory animals, guinea pigs being the most commonly used.

So far, no one has successfully been able to keep *M. leprae* alive through succeeding generations on laboratory media, although many attempts have been made, and one or two attempts now in the experimental stage may prove to be successful. Also, until about 1960, no one had been able to successfully grow this germ in animals. After years of research, Dr. Charles Shepard at the U.S.P.H.S. Communicable Disease Center in Atlanta, Georgia, announced that he had been able to grow the bacteria in the footpads of mice. However, the method requires meticulous tech-

nique and careful standardization of several factors. It also takes several months for the bacteria to grow to useful numbers. This, of course, somewhat limits its practical value, but this is the most useful method we have at this time.

Growing leprosy bacteria by the mouse footpad inoculation method has been improved and modified over the last ten years by Shepard and others. It has been used to demonstrate that the sulfone drug most commonly used for treatment will apparently render most of the bacilli non-viable in three to four months, in most cases, and that the number of "live" (i.e., solid-staining) organisms is markedly reduced in from three to 12 months. It has been used to test the effectiveness of drugs. It has also been useful in determining bacterial resistance to medication. The biggest stumbling block was overcome when it was found that this germ appears to grow best at 32°C, as it is well known that almost all pathogenic organisms grow best at 37° to 37.5°C. This observation also has practical importance to the clinician, as it probably explains why this germ grows best in the coolest areas of the body—the hands, the feet, the nose, the ears, and the testicles. This method, however, has the drawback that it is slow and requires unusual patience, and one must be highly trained in this exacting technique.

The mode of transmission, or how this disease is contracted, is so far scientifically unproven. All available evidence leads us to believe that it may be contracted by direct skin-to-skin contact. However, there are the possibilities of droplet infection from nose and mouth discharges, or insect vectors such as bed bugs or cockroaches, though research has failed completely to prove or disprove this somewhat fanciful theory.

It has been said in the past that leprosy is but feebly contagious. This, in my opinion, is a misconception. Studies have shown that over 98% of adults are immune to this disease, but those who are susceptible appear to be highly susceptible. This is quite different from saying the disease is "only feebly contagious." There are also studies that indicate a genetic inclination to infection,

Hale Mohalu Hospital, and Department of Tropical Medicine, University of Hawaii Medical School.

and particularly a familial lack of immunity. We suspect that children are somewhat more susceptible to this disease than adults, and their chances for contact are also greater, as children, up to the age of seven or eight particularly, are often in frequent skin-to-skin or close respiratory contact with adult members of the family, or friends. There is no question that adults do contract leprosy, but their risk is less. The fact that the incubation period is very long may give a misconception of the time the disease was contracted. The average incubation time is three to five years. The shortest known time is about one year, and not uncommonly it is 10 to 25 years from the last known contact to apparent onset and possibly, but rarely, even longer.

Over 50% of patients who contract leprosy have no idea when or where they have gotten it. We believe that these people may have contracted the disease from a communicable case that has gone unrecognized. We suspect that these exist, as we have cases where several children in a family apparently have been infected by a parent in whom clinical signs of the disease did not show up for many years. These possible carriers, as we might call them, eventually will develop clinical leprosy, or some will cure themselves, apparently due to increasing immunity.

ETHNIC GROUPS

Up to 1963, well over 50% of cases in Hawaii were either pure or part Hawaiian, the next most common group being Filipino, then Samoan, and only a few Chinese, Japanese, Korean, or Portuguese. No Caucasians have contracted this disease for many years in this state. Previous to about 1920, over 90% were pure or part Hawaiians. Since 1963, the ethnic percentage has shifted, due to immigration, the pure or part Hawaiians being down to about 40%, and the largest group of immigrants being Filipinos, then Samoans. It would seem, therefore, that these people either have a low immunity or their exposure to infection is greater. Numerous studies have been made on immunity, susceptibility and resistance, and several other studies are now in progress, but so far we have only partial answers to these exceedingly important questions.

HISTORY

Leprosy is a disease of antiquity, as there are evidences of its presence almost as long as there is history of mankind. The word for leprosy is mentioned in several places in the Bible, and Chapter 13 in Leviticus is devoted almost entirely to this disease. Originally, the word for leprosy in Hebrew, *zara'ath*, meant "serious illness" or

"plague," with connotations of sin and uncleanness. In biblical times, there were no doctors or dermatologists; all cases were examined by priests, and the method described in the Bible for diagnosis of this disease had no sound medical basis. Therefore, many people with such common diseases as psoriasis, fungus infections, eczema, scabies, and so on, were often proclaimed to be leprosy. Leprosy, undoubtedly, was present, but the percentage of people who were diagnosed as leprosy and who actually had this disease, was doubtless only a small percentage of those who were declared to be leprosy.

There is historical evidence of leprosy in Europe from nearly the first century. The number of people afflicted with this disease gradually increased until the fourteenth century when the disease reached its height, when there were thousands of cases. From then on, the number gradually declined. This is believed to be due to two factors—first, the great plagues that swept Europe in the middle ages, and second, it is postulated that people gradually built up a certain degree of immunity throughout these centuries. Whatever the reason, the incidence gradually declined until by the middle of the twentieth century, there were only a few known cases on the continent of Europe, with the exception of Portugal and Spain, where there are quite a number of known cases.

EPIDEMIOLOGY

Throughout the world today, it has been estimated that there are a minimum of ten million cases and perhaps as many as twenty million. No one knows with a reasonable degree of certainty. It is found endemic or epidemic only in some countries. Other countries are almost entirely free from the disease. It is endemic in Japan, Taiwan, China, and Korea. It might be considered epidemic in Southeastern Asia and India. There is very little in Australia and practically none in New Zealand. In South America, there is practically none in Chile, but it is found in almost all the other countries to some extent, mostly in Mexico and Brazil. A band several hundred miles wide through central Africa has the heaviest incidence of any place in the world, particularly in Uganda and Nigeria. In other parts of Africa, there are fewer cases by comparison. At present, therefore, this is largely a disease of dark-skinned people, and is mostly in tropical and subtropical climates.

In the United States, it is endemic in Florida, Louisiana, Texas, California, and Hawaii. Sporadic cases may be found rarely in other states. At this time, there are fewer than 3,000 known cases in the continental United States and less than 400 known cases in Hawaii. In the continental United States, most hospitalized patients are treated at the

leprosarium in Carville, Louisiana, a U. S. Public Health Service facility. There are also smaller treatment centers in connection with the U. S. Public Health Hospital in San Francisco, and outpatient clinics in San Pedro, near Los Angeles, one in New York City, in Miami, Florida, in New Orleans, and in various locations in Texas.

In Hawaii, leprosy was introduced somewhere around 1830 either by the Chinese, who came as immigrants, or by the Hawaiians themselves as sailors in crews of trading ships. As more infected immigrants or travellers came, it gradually increased and became very prevalent in the susceptible Hawaiian population. By 1860, it had begun to assume epidemic proportions. By 1865, the problem became so serious that the Board of Health advised King Kamehameha V to adopt measures to control the disease. It is interesting to note that Hawaii's Board of Health antedated the first on the continent—in Massachusetts—by 19 years. The Board of Health, which had gathered information from European and Asiatic centers about leprosy, recognized that it must be contagious, and decided on the policy of segregation, the only method then known, or believed, to help control this disease.

Two areas were set aside—one called the Kalihi Receiving Hospital in Kalihi, and the other, the Kalawao district of Kalaupapa, a peninsula on the island of Molokai, later enlarged to an area of about seven square miles. For a few years, the Settlement on this peninsula was at Kalawao; it was then moved to Kalaupapa, the climate there being warmer and drier. The original idea was to hospitalize the milder cases at the Kalihi Receiving Hospital, and if they recovered, to release them back into the community, and if they became worse, to send them to Kalaupapa. For many years, the more severe cases were sent to Kalaupapa by steamer, but later by air when plane travel was available. Kalaupapa was chosen because it is isolated by its terrain, with the sea on three sides and cliffs going nearly straight up over 1,500 feet on the landward side. It took years to make the trail going up and down these cliffs.

In 1949, the Kalihi Receiving Hospital was closed and moved to Hale Mohalu, a complex of buildings built during World War II as a naval installation for Waves. Since 1949, all new cases have been treated at Hale Mohalu, unless the patient elected to go to Kalaupapa.

CASEFINDING

At the present time, most new cases are found by physicians in private practice. The overwhelming majority of cases are picked up in this way. Some are found at the Health Department's con-

tact clinics. When a new lepromatous case is diagnosed, the relatives and close friends with whom he has had contact are interviewed by the social service worker and public health nurse from the Communicable Disease Division of the State Board of Health. These contacts are requested to come to a contact clinic at a designated time and place once a year for 5 to 20 years. These clinics are held on each island at times when it is most convenient for these contacts to come. There, they are examined by an experienced leprologist, and if a suspected case is found, the necessary laboratory tests are also made, consisting of scraped-incision procedure and biopsy. Contacts of the mild (tuberculoid) type of case are now usually examined for only a minimum period, as the tuberculoid type of case is considered noncommunicable. For the past several years, not over one or two cases a year, on the average, have been found at contact clinics.

Federal institutions, particularly Tripler Hospital and U. S. Department of Immigration, turn up occasional cases.

When a physician suspects a patient may have leprosy, he usually refers him to a dermatologist, experienced in leprosy, for a diagnosis, or he may call the Executive Officer, Communicable Disease Division, State Board of Health, and the patient will be seen at the State's expense.

Should any patient question the diagnosis of leprosy, he may be further examined by a legally constituted board of three physicians, one appointed by the State Board of Health, one by the Hawaii State Medical Association, and the other by the patient. Their decision is considered final.

INCIDENCE

The number of new cases per year has varied markedly over the years, and has particularly declined since 1950, when the results of a fairly good treatment became evident. From 1865 on, from 100 to 300 or more cases a year were found, the height of the epidemic being between 1880 and 1900. About 1890, there were as many as 1,180 patients at Kalaupapa alone. By 1920, the number of new cases had dropped to a little over 100 and by 1930 to about 50. It gradually declined since then, and since 1950, the average has been about 16 a year. The percentage of the different types or classifications of the disease will be discussed in a later paragraph.

A peculiarity of this disease that has never been satisfactorily explained is that the lepromatous form affects men more than women, almost 2 to 1, and this percentage is worldwide. This incidence varies in some countries, but it holds fairly true in Hawaii.

CLINICAL COURSE

Leprosy is primarily a disease of skin and superficial nerves, but often it may involve the mucous membrane of the nose and throat; the larynx, and rarely even the trachea and larger bronchi; then the eyes; and in men, the testes. In the late stages, it may involve (though only subclinically) nearly all the internal organs. The superficial nerves most commonly affected are the ulnar, radial, superficial peroneal, facial, great auricular, supraorbital, and later the median and sciatic, and their branches. The central nervous system is not involved. There is some invasion of muscle in severe cases, but muscle atrophy, which is common, is secondary to nerve involvement. Unopposed muscles frequently become severely contracted.

CLASSIFICATION

In the literature there are many classifications of this disease, but for several years, we have used as nearly as possible, the simple classification into three categories:

(1) Lepromatous, the most severe, in which there are many bacteria; the skin is involved first, and the involvement of nerves and other organs follows.

(2) Tuberculoid, the mildest, but sometimes the most crippling, in which few or no bacteria are usually found. Clinical evidence suggests that it may involve the superficial nerves first, or these may be involved more or less simultaneously with a skin eruption.

(3) Indeterminate, in which bacteria are found in moderate numbers, usually with both nerve involvement and skin lesions. As time goes on, these cases may become lepromatous or tuberculoid, or they may stay indeterminate, depending on the immunology of the patient and his response to therapy.

Of all patients diagnosed in Hawaii since 1946, 40% had the tuberculoid form, 22% the indeterminate form, and 38% the lepromatous form.

In books and medical literature on leprosy, other terms are also used such as, borderline lepromatous, borderline tuberculoid, neurocutaneous, maculoanesthetic, and dimorphous, the latter having features of both lepromatous and tuberculoid disease.

CLINICAL COURSE

Since this presentation is for the purpose of outlining the basic facts, no attempt will be made to go into any details in depth. This outline will also be rather diagrammatic. Leprosy, regardless of the type, often begins as spots or blotches, usually pale (hypopigmented) or they may be hy-

perpigmented, or reddened. There are often areas of anesthesia in these areas of skin eruption, or localized areas of anesthesia may be found on hands or feet, or occasionally the face.

Lepromatous Leprosy

The lepromatous or cutaneous type of leprosy is the most severe, and the most highly communicable. This type of eruption falls into four categories: macular, diffusely infiltrative, nodular, or ulcerative. It most commonly begins with a few small, medium, or large infiltrated plaques or nodules. The arms, legs, and face are the areas most commonly affected, but eruption on the body is nearly as common. Often there is a generalized eruption consisting of small, medium, and large nodules occurring singly or in groups. There may be only generalized infiltration of all of the skin over the entire body. Large granulomatous thickened areas may occur on the face and ears, giving rise to the so-called "leonine facies" of lepromatous leprosy. Occasionally, the skin may have areas of ulceration and infection, which may be localized or generalized. If the disease progresses without treatment, the mucous membranes of the mouth, nose and throat, trachea, and larger bronchi become thickened and granulomatous. Tracheotomy or permanent tracheostomy may be necessary.

As the disease progresses, the eyes may become involved. The patient may develop iritis, keratoconjunctivitis, iridocyclitis, or dacryocystitis, or there may be a general invasion of the anterior eyeball by the organism. Eventually, there may be glaucoma, staphyloma, scotomas, and blindness. Enucleation of one or both eyes may be necessary.

In time there may be destruction of the nasal cartilage, giving rise to a "saddle nose," a punched-in appearance, or the nose may be pushed to one side.

Gradually, alopecia, first of the outer thirds of the eyebrows, may occur, and may progress to total loss of brows and lashes, followed occasionally by areas of alopecia of the scalp.

The superficial nerves may be gradually involved—the ulnar, radial, superficial peroneal, great auricular, facial, supraorbital, and later on the median and sciatic. This may be unilateral or more often bilateral. This gives rise to trophic disturbances such as atrophy of the muscles of the hands, feet, arms or legs. Secondary diminution of circulation may occur, and this, combined with nerve damage and trauma may cause shortening of the digits and plantar ulcers. The bones of the hands and feet show absorptive changes. At first, x-ray changes look as if the bones had been placed in a pencil sharpener. Then, they gradually

become shorter, show demineralization, and seem to be out of place. Secondary osteomyelitis may occur and Charcot joints may show up in the wrists and ankles. Due to nerve damage, the patient may have wrist drop or foot drop.

As the disease progresses, anesthesia, which begins in the digits, gradually involves the hands, feet, and later on the arms and legs, creeping on gradually over a period of months or years. Sometimes the thickening around the nerves makes these so large and painful, that it is necessary to do a neurolysis—stripping away the heavy fibrous perineurium.

If the disease progresses without treatment, the testes may be involved and there may be gynecomastia. Amyloid kidney involvement, giving rise to nephrosis, may occur. Amyloidosis usually involves the kidneys first, then the spleen, liver, adrenals and other internal organs. These patients may die from amyloidosis or an infection such as pneumonia. Most patients who die young, die from kidney complications.

In the early days in Hawaii, most patients died of their concomitant tuberculosis, but the incidence of tuberculosis now is about that of the general population. Very few have died from leprosy itself, as leprosy is much more of a crippling and debilitating disease, than a killing disease. Nowadays, many of our patients die of old age.

At anytime during the course of the disease, the patient may break out, all over the body, but usually on the arms and legs, with small, medium or large bumps, which come on quickly, and resemble erythema nodosum—the so-called ENL (erythema nodosum leprosum) reaction. This is accompanied by malaise, chills, and fever. It may be self-limiting in three weeks to three to four months, or may be persistent and progressive. Studies have demonstrated this to be due to large numbers of bacteria being killed, and it is much more common within a few weeks after beginning an effective treatment. The reaction may be controlled by giving steroids, or in some cases, thalidomide.

Tuberculoid Leprosy

Tuberculoid (formerly “neural”) leprosy is generally more benign and may be self-limiting if the patient has a high degree of immunity. Often times the nerve damage may precede the skin eruption in this type, though the skin eruption may come simultaneously. Simple flat hypopigmented (never depigmented) macules are the most common, usually only a few, sometimes only one or two, occurring on almost any part of the body. Sometimes an eruption following roughly the course of the ulnar or superficial peroneal or facial nerves,

resembling contact dermatitis, may be the presenting symptom. This is always accompanied by anesthesia of the area.

Anesthesia may be tested for with ice water and hot water (110° F.) in test tubes, with a pin, or with cotton wisps. Often the patient gets a burn in the area that he doesn't feel, and it becomes infected, causing him to seek medical attention. Since the nerve involvement often affects the muscles supplying the digits, the patient gradually develops contractures followed by the “claw hand,” wrist drop, trophic plantar ulcers, and later on Charcot joints of the ankle or wrist. Following nerve damage, there is a diminution of blood supply to the digits and gradual shortening, occasionally to the point where there are practically no digits left. The toes or fingers never “drop off.” Before the days of antibiotics, amputation was sometimes necessary due to injury or burns followed by infection.

If the facial nerves are involved, patchy, partial unilateral or bilateral facial paralysis may occur, or the supraorbital nerves may be involved, giving rise to anesthesia and paralysis of the involved areas. Lagophthalmus (inability to close the eyelids) and ectropion often result. Like the lepromatous case, tuberculoid cases may undergo intermittent episodes of exacerbation and remission. Usually, this consists of spreading and acute erythema of existing lesions, and acute swelling of nerves. This type does not have the ENL reaction, as in lepromatous leprosy.

Indeterminate Leprosy

The indeterminate type, much less common, is about half way between the lepromatous and tuberculoid forms, and may have symptoms of either. Bacteria are found in moderate numbers only. Areas of hypopigmentation are quite common. The ENL reaction seldom if ever occurs. The indeterminate type may stay indeterminate or as time progresses, may become lepromatous or tuberculoid, depending upon the patient's state of immunity and his response to treatment.

LEPROMIN TEST

This test is not a diagnostic test but is only for the purpose of classification, and has some prognostic value. The test material is made by removing a small piece of skin from an untreated heavy lepromatous case. This is sterilized by boiling or autoclaving, and ground up in a mortar or small blender. Usually 60 to 100 cc are made up in a proportion of 1 gram of tissue to each 20 ml normal saline, and then filtered through a nylon cloth filter. Recently, it has been recommended that this be standardized to 160×10^6 bacilli per ml, and that .05 ml be injected intracutaneously. Re-

action, if one occurs, is usually at its height in about three weeks. The reaction is negative in lepromatous cases, positive in the tuberculoid type, and may be either negative or weakly positive in the indeterminate case, depending on the state of the patient's immunity. This is also known as the Mitsuda reaction. A corresponding response called the Fernandez reaction may occur in about three days, and fades in about a week. A strong lepromin reaction indicates a good prognosis—nothing more. It does *not* indicate that the patient has leprosy.

DIAGNOSIS

The triad of diagnosis in leprosy is:

(1) Clinical symptoms, which have been documented. Among these, localized anesthesia is of great importance, especially in tuberculoid cases.

(2) Biopsy, which in the lepromatous and tuberculoid forms, is usually pathognomonic, using hematoxylin and eosin stain, and in which acid-fast bacilli are found in the lepromatous and (often) indeterminate types, using the Ziehl-Neelsen acid fast stain. Ordinarily, bacilli cannot be demonstrated in the tuberculoid cases by this technique.

The chief characteristic of biopsy in the lepromatous type shows changes in the upper dermis consisting mostly of histiocytes, and the transformation of histiocytes into vacuolated lepra (Virchow) cells or into epithelioid cells. This also takes place in the endoneural and perineural spaces.

Biopsy in the tuberculoid type mainly shows the dermis invaded by a network of strands of cells, mostly epithelioid, forming a tuberculoid granulomatous structure with palisading of the cells and whirl formation. Langhans giant cells are often present.

Biopsy in the indeterminate type usually resembles that of any chronic dermatitis, and is not usually helpful unless nerve involvement is demonstrable.

(3) Scraped incision technique or "skin snips." This is done by taking a sharp instrument such as a scalpel or the corner of a razor blade, making a small nick in the skin and scraping the sides of the cut skin, trying to get tissue juice and pulp with very little blood. The area of most skin activity is picked for the site of the skin snip, or if none exists, the ear lobe is used, or snips may be taken from several areas. The bacteria are found mostly just below the epidermis. This material is deposited on a clear slide and stained with the Ziehl-Neelsen acid fast stain. Other stains have been tried, but this one seems to be the best and is universally accepted. The slide is then examined with good illumination using the standard oil im-

mersion lens. The number of bacteria is gauged from 1 to 6+ as follows. This is called the bacterial index or BI.

- 1+ 1-10 bacteria in 100 fields
- 2+ 1-10 bacteria in 10 fields
- 3+ 1-10 bacteria in 1 field
- 4+ 10-100 bacteria in 1 field
- 5+ 100-1000 bacteria in 1 field
- 6+ Clumps or 1000+ bacteria in 1 field

In addition, the slide is carefully examined, usually in several fields, for the percentage of solid-staining forms. This morphologic index, or MI, has become especially important in the last four years. The percentage, usually high in a new lepromatous case, may drop to five or less in three or four months and to three or less in four months to a year. When the MI drops to three or less, the patient's infection is considered noncommunicable.

Usually, patients are now re-examined once a month, and this information is highly important. However, it is a time-consuming technical procedure, and the method of determining a solid-staining organism has not been completely standardized worldwide.

Nasal washings and nasal smears are no longer being done. Here in Hawaii, it has not been found to be an accurate index of infection. We usually find mycobacteria only in about 30% of lepromatous cases, and diphtheroids may be found, closely resembling leprosy bacilli, even in normal persons' noses.

DIFFERENTIAL DIAGNOSES

Differential diagnosis is based on the diagnostic triad. Among the diseases that must be considered in differential diagnosis are fungus infections, psoriasis, contact dermatitis, atopic dermatitis, pityriasis rosea, collagen diseases, scleroderma, vitiligo, tinea versicolor, urticaria, neurofibromatosis, granuloma annulare, lymphoblastomas, sarcoidosis, and erysipelas, to mention the most common. The skin eruptions of leprosy may stimulate almost any dermatological condition.

Nerve diseases that may need differentiation include peripheral neuritis, poliomyelitis, syringomyelia, and traumatic neuropathy.

TREATMENT

The ideal treatment for leprosy has yet to be discovered. Until 1941, almost every medication known that looked as if it might work was tried, and all were found ineffective, except chaulmoogra oil, an oil gotten from the seeds of the *hydnocarpus* tree, which grows in India. This was given crude or purified, orally or by subcutaneous, intracutaneous, or intramuscular injection. It was acetylated, iodized, and esterized. For many years, it was thought to be the best preparation available,

but a double blind study proved it to be only slightly effective. It was apparently effective mostly in the tuberculoid cases, less so in the indeterminate cases, and practically useless in the lepromatous type. Its actual effectiveness in all types is controversial.

In 1941, at Carville, a trial was started with Promin, a sulfone drug. This drug was chosen because it would cure experimental tuberculosis in guinea pigs, but when tried on humans, was ineffective, another instance where an experiment that was successful in animals, was unsuccessful when applied to humans. Since the leprosy bacteria resembled tuberculosis, and no animals could be infected with leprosy at that time, it seemed worthwhile to try this drug on human cases of leprosy. The dose had been worked out with the animal experiments. Promin had to be given intravenously, as it was irritating to the gastric mucosa.

Within a few months, it was apparent that it was effective. After two years' treatment, many cases appeared well, and after five years of treatment, over 50% of the cases were clinically and bacteriologically negative.

During the first five years of the use of Promin, other sulfone drugs that could be given orally were tried—Sulphetrone, Promizole, Promacatin, Diasone, and Avlosulfon (dapsone). This last drug, diamino diphenyl sulfone (DDS), is found at the present time to be the most useful, worldwide. Diasone is used in some cases as some patients seem to tolerate it better. Promin, Promizole, and Promacatin are now rarely used, as the results from DDS given orally in small doses appears to be the best. All these sulfone drugs are converted into DDS by the body. It is believed that these drugs work by activation of the lysosomes in the cells, the lysosomal activity apparently inactivating the bacteria.

A curious fact about leprosy is that dead bacteria do not leave the body as quickly as in most other diseases. In acute bacterial illnesses, dead bacteria are eliminated from the body in hours or days, but in leprosy they leave very slowly and no drug yet found hastens the removal process. It simply takes time, often years, for the body to eliminate these dead bacteria.

In treating these cases with sulfones, we usually start with a small dose and increase gradually each week, arriving at the maximum in about six weeks. The optimum dose of DDS is still not known. For several years, we began with 50 mgm twice a week and increased to 100 mgm daily or sometimes 200 or 300 mgm daily. These large doses would occasionally cause blood dyscrasias such as hemolysis, leucopenia, methemoglobinemia, or rarely a drug dermatitis or psychosis.

About four years ago, the research men told us that these large doses seemed unnecessary, so we now begin with 10 to 25 mgm once a week and increase by 10 to 25 mgm every week or two until this dose is given daily. The routine dose of Diasone is 0.3 gm daily. Since using these dosages, we have had few ill effects from these drugs, and patients are getting well faster. Several cases have become clinically and bacteriologically negative on only 10 mgm daily.

After patients have become bacteriologically negative, we have found, they must keep up the medication for minimum of five years; we believe lepromatous cases should continue on medication for life. In other words, there are bacteria in the tissues, but we cannot always find them. The percentage of reactivation for several years was about 23%, but since we have been more insistent on regular medication after hospital release, the percentage has dropped to less than 5%.

There is also a marked variation in the treatment that may be used in each individual case. Many mild tuberculoid cases will overcome the disease without treatment. Other tuberculoid cases may be quite severe and will require treatment for several years. Since we find few or no bacilli in most tuberculoid cases, and new cases have not been traced to them, these are considered non-communicable, and are rarely hospitalized. It is advisable that indeterminate and lepromatous cases be hospitalized until the disease is clinically quiescent and the bacteria are no longer viable. This may take from 3 to 12 months, usually less than 6 months, but there is considerable variation in response to treatment. When patients are released from the hospital, they are kept under treatment by a private physician for a minimum of five years.

Many drugs other than sulfones have been given a trial since 1941. Of all the antibiotics that have been tried, only streptomycin has been of value, and its value is limited. A thiourea compound known as Ciba 1906 has been useful, but its effectiveness is not very high. A phenazine dye known as B663 has recently been shown to be effective and particularly useful when cases seem resistant to sulfones. However, only recently have restrictions on this drug been lifted enough for trial here. It has the disadvantage of often turning patients a peculiar bluish red color.

Steroids have been useful in controlling the reactive states, particularly the erythema nodosum leprosum (ENL) skin eruption. Thalidomide has also been used to control ENL reaction, but can be used in women during the child-bearing age only with rigid contraceptive precautions, and, in about 10% of cases, produces other undesirable side effects. Steroids and thalidomide have no apparent effect on the bacilli.

Other experimental drugs have been tried on mice and some have been given limited human trials. Two or three of these may prove to be successful, particularly DADDs (diacetyl-diphenyl-diamino sulfone) which is given intramuscularly every 75 days, and is now undergoing a large scale trial in several areas outside of the United States.

RESULTS OF TREATMENT

The result of any treatment depends on how early in the disease treatment has been started, the severity of the case, and the state of immunity of the patient. For many years, in Hawaii—until August, 1968—bacteriologically positive cases were hospitalized until no bacilli were found in skin “snips” for three months in a row. Most cases who respond well to treatment have become clinically well in three to 12 months. It took over five years, however, to render approximately 50% of the cases bacillus free, nearer 10 years for some, and longer for others. About 10% never became entirely free and about 5% have not responded well to treatment—usually because treatment was started during the advanced stages of the disease, or was irregular, or in some patients because the bacilli apparently become sulfone-resistant.

Since August, 1968, by which time we had gathered enough experience with estimation of the morphologic index (MI), we have been releasing from the hospital all clinically negative cases whose MI is 3% or less, with a BI of three or less when tested every two to four weeks. In the spring of 1969, the legislature repealed the laws requiring hospitalization—i.e., “isolation”—of leprosy patients. Hospitalization is now required only if a clear danger to the public health exists, though it is recommended for almost all lepromatous cases until the patient is stabilized. Patients may also be advised to be hospitalized for treatment of the complications of leprosy. Otherwise, all patients will be treated on an outpatient basis. Liberalized public health regulations have been set up to implement these changes.

KALAUPAPA AND HALE MOHALU

There are approximately 170 patients at Kalaupapa, of whom about 40 have active leprosy. Many married patients live in cottages. Those who are unable to care for themselves or are ill are taken care of in the hospital. There is one doctor and there are about six nurses, some of them Catholic sisters. Altogether there are about 40 non-patients, consisting of hospital help, maintenance men, cooks, and office employees. There are a Catholic priest and a Protestant minister, and services are held regularly. When the medical facilities at Kalaupapa are inadequate, patients are

transferred by plane to Hale Mohalu or one of the general hospitals in Honolulu, a trip of only 25 minutes.

At Hale Mohalu, for several years, until August, 1968, we averaged from 85 to 100 patients, but due to the liberalization of the regulations in 1968, many have been discharged and we are now down to less than 40 patients. For several years, in addition, we have had from 12 to 30 patients from Kalaupapa, averaging about 20. The staff at Hale Mohalu consists of a total of 45 to 50 non-patients. These include one doctor, 12 graduate nurses, janitors, maintenance men, cooks, office workers, one laboratory technician, one occupational therapist, one physiotherapist, one recreation and rehabilitation director, and a part-time dentist. There are also approximately 20 specialist-consultants, one or two in every field of medicine.

Physically, Hale Mohalu consists of a complex of two-story wooden buildings built during World War II as dormitories for Navy Waves, on 11 acres of land. After the war, it lay vacant for several months, and then was taken over by Leahi Hospital as a convalescent tuberculosis hospital. When they moved out, in October, 1949, the old Kalihi Receiving Hospital was closed and moved to Hale Mohalu. Since that time, all new cases of leprosy that needed hospitalization have been treated here. They could by law elect to go to Kalaupapa if they wished, and over the years a few have so elected. Others have come from Kalaupapa and elected to stay at Hale Mohalu. Due to the gradual deterioration of the buildings, it has been a constant struggle to keep them in useful repair. A new building has been under consideration for some time. Also, considerable deliberation has been given to the possibility of building this on the grounds of Leahi Hospital, in connection with the Medical School of the University of Hawaii. Final decision about the location has not as yet been made.

There are three things we do not do at Hale Mohalu Hospital: major surgery, radiology, and obstetrics.

PROPHYLAXIS

Many years ago, when mothers were allowed to raise their children, about 40% developed leprosy. Then a home was established for the babies and they became wards of the State. About 12% developed leprosy. Since 1930, babies have been separated from the mothers at birth and raised in foster homes. This may seem cruel, but not a single one has developed leprosy since that time. Most of them have been taken over by relatives—brothers, sisters, cousins, aunts, uncles, or grandparents. Very few have been adopted out, as the parents hope to take the children back when they recover.

It is evident that this disease is not hereditary or congenital. It is also evident that some families are highly susceptible, although this susceptibility and resistance cannot be definitely defined at the present time. For instance, conjugal infection has only been about 7% in Hawaii. The genetic predisposition and familial susceptibility are questions to which we do not have all the answers at present.

FINANCING

Kalaupapa and Hale Mohalu are controlled by the State, but the Federal Government reimburses the State for the cost of caring for its hospitalized patients on a per diem rate, but not to exceed an annual appropriation by Congress, which now amounts to about 85% of the cost. The State furnishes the physical equipment. With a few minor exceptions, everything is free to the patients. They are also given a small expense and clothing allowance. Arrested cases living at Kalaupapa are given the privilege of staying there as long as they wish.

AUXILIARY

For several years there has been an active auxiliary consisting of men and women who have devoted their time, talents, and finances to be helpful. At Hale Mohalu, a beauty parlor for the women, and a thrift shop where patients could buy things inexpensively, have been installed. Several people have devoted their time and energies to entertain, and be helpful to some of the old and crippled patients, and others. Money has been spent to buy some things that the State could not provide. A fashion show has been held each year, attended by people in various walks of life including Mrs. John A. Burns, the first lady of Hawaii. The Zonta Club of Honolulu and the Rotary Club of Pearl Harbor lend their support. The Auxiliary is a very active organization, and is now extending its activities beyond Hale Mohalu to Kalaupapa and to the outpatients.

REHABILITATION

Hale Mohalu has a department of vocational rehabilitation where new skills are taught. At present, these are mostly automotive mechanical skills for men and sewing for women. We also have had others available.

However, rehabilitation, we find, means different things to different people. The staff at Kalaupapa and Hale Mohalu are continually practicing "preventive" rehabilitation. To an ophthalmologist, rehabilitation may mean eye surgery; to an orthopedist, it may mean orthopedic surgery; to

a sociologist or economist, socioeconomic rehabilitation, consisting of teaching a patient new skills, or seeing that he has a proper home to live in, and economic stability after he leaves the hospital; to one of the clergy, it may mean spiritual rehabilitation; or to those who are most interested, it may mean complete physical rehabilitation. Rehabilitation may also mean attempts by newspapers, magazines, and other news media to try to erase the stigma that has long been attached to this disease, a goal that we hope to eventually attain. To my mind, rehabilitation should be viewed in the broad sense that encompasses all these things, and this is our long term final goal for our patients: in other words, total rehabilitation.

PREVENTION

In various parts of the world, preventive measures have been given trials for several years. After examining all available data, we now advise DDS for close contacts of lepromatous cases, 10 mgm daily for a period of three years. Clinical research has shown that this is apparently preventative in well over 50% of cases under the age of 12 years.

The use of BCG vaccine, the one developed in France and used in many places, other than the United States, as a preventative against tuberculosis, has been given extensive trial with leprosy for about 12 years. The results are controversial, but there is evidence to show that most of the apparently good results are gotten by using this on tuberculin-negative cases under the age of 15. We have been doing this in Hawaii for considerably over a year, and hoping that it will have some preventive effect.

Often, people ask what the staff members in a leprosy facility do to prevent contracting leprosy. We use simple measures. We wear gowns that are changed daily, we wash our hands often, and use gloves when handling a case in the communicable stage. We know, however, that nearly 99% of adults are resistant to this disease. No one on the staff at Hale Mohalu or Carville, Louisiana, has ever been reported to contract this disease from a patient. At Kalaupapa Father Damien died of the disease; another priest, Father Peter, had one spot on his forehead that was removed surgically, and there was no further extension of the disease.

Our hopes for the future are better methods of treatment, prevention, and rehabilitation. We are also doing everything we can, to the extent of our abilities and knowledge, in reducing the ancient stigma attached to leprosy.

We hope and believe that with the procedures now being carried out and those contemplated, we are carrying out a program that in practical application should be second to none anywhere. ■

Serum Protein Changes During Antituberculosis Therapy

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- *C-reactive protein, immunoglobulin levels and serum protein distribution can be correlated quite well with the efficacy of therapy and the occurrence of positive acid-fast cultures in tuberculosis patients. It is suggested that concurrent examinations of CRP and IgA would be effective in the evaluation of the efficacy of the drug employed and for the prognosis of tuberculosis.*

C-REACTIVE protein (CRP), discovered by Tillet and Francis in 1930,¹ is a protein appearing in the serum of patients during acute inflammatory processes and tissue-damaging episodes. It was initially reported to occur in patients during the onset of an acute pneumococcal pneumonia attack and to persist throughout the acute phase of the disease. Since then, CRP has been reported in all diseases in which inflammation and tissue necrosis occur. Ash,² for example, as early as 1933, noted CRP in diseases due to gram negative and gram positive organisms, as well as in tuberculous infections.

Since these initial observations, numerous reports have appeared emphasizing the value of CRP in assessing disease processes.³⁻⁵ Since CRP

appears rapidly following onset of the disease, and clears as rapidly from the serum following subsidence of the inflammatory phase, its use has been of value in following the effectiveness of the therapeutic regimen, especially in the treatment of rheumatic fever, where CRP has been employed for the evaluation of the efficacy of steroid therapy.^{6, 7}

Recent impetus in the assay of CRP for the evaluation of both the intensity and the prognosis of a variety of illnesses has been reported.⁸⁻¹⁰ Included in these reports are clinical literature on CRP in tuberculosis.¹¹⁻¹⁴ The consensus of these reports can be summarized as follows: (1) appearance of CRP in serum of tuberculous patients can be correlated with the severity and intensity of the disease and with presence of acid-fast organisms; (2) CRP assay is useful in assessing drug therapy; and (3) CRP assay could thus be a valuable tool for the prognosis of the disease.

This study was carried out to re-assess the value of CRP and to examine, concurrently, such other parameters as immunoglobulin levels, serum proteins, and bacterial analysis in the tuberculous patient. The data presented herein are the results of such an examination.

MATERIALS AND METHODS

Patients: A total of 41 patients at Leahi Hospital with far advanced, moderately advanced, chronic, and minimal tuberculosis was examined in this study. This group consisted of 12 women, with a mean age of 73.4 years (range of 48 to 89 years), and 29 men, with a mean age of 61.2 years (range of 28 to 90 years). The patients

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This work was carried out in the Department of Pathology at the University of Hawaii Medical School, Leahi Hospital, during the sabbatical leave of Miss Tamblyn (Assistant Professor of Microbiology and Public Health) from California State College at Los Angeles.

TABLE 1.—*C-reactive protein appearances and serum protein levels in sera of tuberculosis, non-tuberculosis diseases and normal individuals.*

DISEASE CATEGORY†	NO. OF PATIENTS	CRP		SERUM PROTEINS*						CULTURE NO. POSITIVE
		mm ppt.	No. Positive	Total	γ	β	α_2	α_1	Alb.	
Far Advanced Tuberculosis	11	2.33 (1.0-4.5)	11	7.54 ± 0.88	2.10 ± 0.70	0.90 ± 0.36	0.76 ± 0.24	0.34 ± 0.28	3.57 ± 0.27	9
Moderately Advanced Tuberculosis	19	1.70 (0-4.0)	17	7.51 ± 0.26	1.67 ± 0.62	0.90 ± 0.24	0.78 ± 0.33	0.31 ± 0.17	3.91 ± 0.27	11
Chronic Tuberculosis	6	3.0 (0-5.5)	5	7.56 ± 0.65	1.91 ± 0.56	0.66 ± 0.36	0.83 ± 0.20	0.29 ± 0.24	3.94 ± 0.17	3
Minimal Tuberculosis	5	0.7 (0-2.0)	3	7.58 ± 0.14	1.62 ± 1.10	0.51 ± 0.26	0.57 ± 0.17	0.41 ± 0.14	4.75 ± 0.20	3
Non-Tuberculous Diseases	10	2.4 (0.5-4.0)	10	6.97 ± 0.36	1.60 ± 0.58	0.87 ± 0.14	0.82 ± 0.10	0.38 ± 0.16	3.43 ± 0.35	—
Normal	16	nil	nil	7.27 ± 0.35	1.67 ± 0.95	0.99 ± 0.23	0.57 ± 0.15	0.40 ± 0.17	3.57 ± 1.30	—

* Serum protein values represented are means \pm standard deviation.

† All cases of tuberculosis were classified according to the 1961 edition of *Diagnostic Standards and Classification of Tuberculosis*, published by the NTA.

were primarily of ethnic backgrounds characteristic of the State of Hawaii: Chinese, Filipino, Hawaiian, part-Hawaiian, and Japanese.

Controls: The two groups of controls consisted of ethnic backgrounds and sex and age ranges similar to those of the tuberculous patients. The normal healthy group consisted of 16 individuals, nine women and seven men with a mean age of 50 years (range of 31 to 67 years). No significant illnesses were noted at the time the blood samples were taken.

The second group comprised nontuberculous patients in the chronic care section of Leahi Hospital. It consisted of five women and five men with a mean age of 70.5 years (range of 31 to

79 years). The diseases diagnosed in this group included arteriosclerotic cardiovascular disease, cancer, pneumonia, cirrhosis, asthma, and thyroiditis.

Immunoglobulin determination: Blood was collected by venipuncture and allowed to clot at room temperature; the separated serum was then kept at -20°C until used. Quantitation of the immunoglobulins was carried out by radial immunodiffusion.¹⁵ The quantitation was performed with commercial immunoglobulin standards and their homologous anti-immunoglobulins, in standardized pre-poured agar plates.* Standard immuno-

* Hyland Immunoplates: Hyland Laboratories, Los Angeles, California.

TABLE 2.—*C-reactive protein appearances and immunoglobulin levels in sera of tuberculosis, non-tuberculosis and normal individuals.**

DISEASE CATEGORY	NO. OF PATIENTS	CRP		IMMUNOGLOBULIN IN GM/100 ML		
		mm ppt.	No. Positive	IgG	IgA	IgM
Far Advanced Tuberculosis	11	2.23 (1.0-4.5)	11	1.69 (1.05-2.70)	0.42 (0.36-0.50)	0.05 (0.01-0.09)
Moderately Advanced Tuberculosis	19	1.70 (0-4.0)	17	1.62 (1.00-2.40)	0.36 (0.19-0.50)	0.06 (0.01-0.11)
Chronic Tuberculosis	6	3.0 (0-5.5)	5	1.88 (1.40-2.52)	0.27 (0.13-0.35)	0.05 (0.01-0.08)
Minimal Tuberculosis	5	0.7 (0-2.0)	3	1.55 (1.38-1.75)	0.28 (0.05-0.48)	0.02 (0.01-0.04)
Non-Tuberculous Diseases	10	2.4 (0.5-4.0)	10	1.61 (0.63-2.40)	0.38 (0.10-0.82)	0.08 (0.01-0.165)
Normal	16	nil	nil	1.51 (0.90-2.10)	0.26 (0.07-.365)	0.06 (0.05-0.10)

* Values are expressed as the means and the ranges are given in parentheses. $P < 0.01$ for IgA in far-advanced tuberculosis; $P < 0.05$ for IgA in moderately advanced tuberculosis; $P < 0.05$ for IgA in non-tuberculosis diseases vs. normal IgA.

TABLE 3.—C-reactive protein, IgA, and IgM levels and mycobacterium culture during therapy.

DISEASE CATEGORY	PATIENT	DATE OF SAMPLE	CRP <i>mm ppt</i>	IMMUNOGLOBULINS MG/100 ML		CULTURE	DRUG THERAPY†
				<i>IgA</i>	<i>IgM</i>		
Far advanced	T.V.*	11/24/67	3.0	430	120	+	INH, streptomycin, ethambutol
		12/08/67	3.0	460	140	+	
		02/03/68	3.5	500	170	+	
	G.H.	02/01/68	1.0	380	45	+	PAS, streptomycin, INH
		04/01/68	1.5	280	20	+	
	F.T.	02/27/68	2.0	480	50	+	INH, PAS, PZA, ethambutol
		04/01/68	0.5	450	5	+	
	J.H.	10/24/67	3.0	370	96	+	INH, PAS
		03/28/68	neg	210	80	—	
	G.M.	02/01/68	0.1	400	12	—	INH, ethambutol, tetracycline
		04/01/68	2.0	230	56	—	
Moderately advanced tuberculosis	D.K.	10/24/67	1.0	500	73	+	INH, PAS
		04/29/68	1.0	230	56	—	
	C.L.K.	10/16/67	3.0	330	87	+	INH, PAS, streptomycin
		03/27/68	neg	230	160	—	
	E.T.	12/27/67	2.0	300	110	+	INH, PAS
		03/28/68	0.5	100	71	—	
	C.C.	01/11/68	1.0	500	12	+	INH, PAS
		03/28/68	0	350	87	—	
	C.M.	12/19/67	2.5	460	12	+	INH, PAS
		03/28/68	1.0	240	92	—	
	J.C.	10/09/67	1.0	450	70	—	INH, PAS
		04/24/68	0.5	210	70	—	
	K.W.	10/23/67	4.0	370	60	+	PAS, INH, streptomycin
		03/28/68	2.0	260	60	+	
Minimal and chronic tuberculosis	B.C.	12/15/67	neg	340	8	+	INH, PAS
		03/27/68	0.5	230	70	—	
	P.G.	10/13/67	2.0	—	—	+	INH, PAS
		03/21/68	1.0	200	16	—	
	A.K.	10/06/67	neg	480	20	—	INH, PAS
		05/01/68	neg	250	10	—	
	K.S.	10/06/67	2.0	180	48	+	INH, ethionamide, ethambutol
		12/20/67	2.0	290	20	—	
		04/07/68	1.0	230	20	+	
	G.N.*	10/18/67	4.5	340	70	+	PAS, INH, streptomycin
		03/28/68	neg	230	30	—	

* Patients expired.

† INH=Isonicotinic hydrazide; PAS=para-aminosalicylic acid; and PZA=pyrazinamide.

globulins were examined in parallel with each group of serum samples and the standard values were plotted (diameter of precipitate vs. concentration of the standard). The values of the group samples thus obtained were interpolated from this standard curve over the standard range examined. Results of group serum samples outside the standard immunoglobulin values were re-examined by appropriate dilutions so that the results fell within the standard values. Immunoglobulin G (IgG), immunoglobulin A (IgA) and immunoglobulin M (IgM) levels were measured by this method.

CRP determination: C-reactive protein was determined by the capillary precipitation method of

Anderson and McCarty,⁵ using horse antiCRP (H-CRPA).† The results were scored semiquantitatively as millimeters of precipitate.

Cellulose polyacetate§ electrophoresis: All serum samples were examined on cellulose polyacetate strip Sephrapore III by electrophoresis. The procedure described by Nerenberg¹⁶ was used. A serum sample of approximately 1 μ l (0.001 ml) was applied to Sephrapore III. After electrophoresis in barbital buffer at pH 8.6, the

† Horse CRPA was obtained from Waimanalo Research Laboratory, Waimanalo, Hawaii.

§ Cellulose polyacetate (Sephrapore III): Gelman Instrument Company, Ann Arbor, Michigan.

strip was stained with Ponceau S; the excess stain was removed with 5% acetic acid; and the strip was then air dried. The strip was cleared by placing it in a solution of 15% acetic acid in ethyl alcohol for two minutes; then removed by placing a clean microslide beneath the strip and flattening it by rolling a clean test tube over it, thus draining the excess solvent. The strip on the slide was placed at a slight angle and air dried to a clear translucent membrane. The cleared strip was examined with a densitometer containing an integrator unit attachment. Values of the γ , β , α_2 , and α_1 globulin, and albumin, were obtained from the densitometric tracing and the total protein analysis.

Total serum protein determination: Total serum protein was determined by the Biuret procedure¹⁷ and reported as gm per 100 ml.

RESULTS

Data of the various laboratory findings are summarized in Tables 1, 2, and 3.

CRP was found in all of the far-advanced cases of tuberculosis and also in a greater percentage of the moderately advanced cases. Eight of the 11 patients in the chronic and minimal groups showed presence of CRP in the serum. Serum protein analysis of all patients showed essentially a normal distribution of the various protein fractions. At first glance, in some instances, slight elevations of the α_2 globulins are indicated, especially with the far and moderately advanced groups. This, however, proved to be not significant ($P > 0.05$). Of interest is the high incidence of positive acid-fast cultures in the far advanced group. All patients in the nontuberculous group gave a positive CRP response. These results are summarized in Table 1.

Table 2 scores the relationship of the appearance of CRP and the immunoglobulin levels of the same group of patients examined in Table 1. Of interest is the elevated IgA in far and moderately advanced tuberculous groups in contrast to that of the normal group ($P < 0.01$ and $P < 0.05$, respectively). On the other hand, the mean values of IgA for the chronic and minimal groups were similar to that of the controls. The IgA for the nontuberculous group was significantly higher than that of the controls ($P < 0.05$). Immunoglobulins G and M of all groups were comparable to that of the control normal group. However, the values for IgM in all groups appeared lower than those reported for other ethnic groups.¹⁹

Table 3 summarizes a serial analysis of the CRP, IgA, IgM and cultural findings of several patients from all of the various stages of the tuberculous groups. These findings are compared with the therapeutic regimen. In general, consistent CRP appearances and elevated IgA levels appear

to correlate with positive cultures. Subsequent disappearance of CRP, and return of IgA to normal levels, were in the majority of instances associated with negative cultures and remission of the disease. On the other hand, persistent CRP and elevated IgA were associated with positive cultures. This was particularly seen in the far-advanced tuberculous group. With the exception of a few cases, most of those in the moderately advanced group showed disappearance of CRP and return of IgA to normal levels concurrently with negative cultures following therapy.

DISCUSSION

Numerous reports¹¹⁻¹³ on the appearance of CRP in patients with tuberculosis, especially in far and moderately advanced states, have been documented. Results presented in this study confirm these findings. In addition, significant elevation of the IgA levels occurred concurrently with appearance of CRP; which correlated significantly with positive acid-fast cultures. Our results concur with previous reports by others^{18,19} on the elevated levels of IgA in tuberculosis and pulmonary disorders.

The concomitant appearance of increases in CRP and IgA does not imply that they are related, since these are distinct antigenic entities. The IgA elevation in tuberculous patients may be attributable to its role in the hypersensitivity state associated with tuberculosis. Such immunologic reactions of IgA with its antigens may trigger the release of CRP, since it has been shown by Hokama and co-workers,²⁰ and Kushner and Kaplan,²¹ that antibody-antigen complexes can stimulate the CRP response.

It has been generally concluded that the usefulness of the CRP response has been hampered by its nonspecific appearances in many disease processes. However, once the initial diagnosis is made, it could become a useful tool in following the course of a disease process. This is attested by its routine use in assessing the efficacy of drug therapy in rheumatic fever disease.^{7,22} Recently, Haghighi and Doust¹⁴ have suggested and demonstrated the value of CRP analysis for prognosis in tuberculosis and for the evaluation of drug therapy. Our results are in agreement with their findings, in that CRP would be a valuable tool for following the effectiveness of therapy and for the prognosis of the disease. In addition, a concurrent evaluation of the IgA levels with CRP analysis would increase the value in the assessment of drug therapy in tuberculous patients.

The clinical observations of the use of CRP in the evaluation of drug efficacy have been verified in part by experimental studies in animals. Riley,²³ Hokama,²⁴ and Combosos,²⁵ and their

co-workers, have shown that some anti-inflammatory drugs such as fluoromethalone and salicylates can suppress the Cx-reactive protein (CxRP) response in rabbits challenged with Freund's complete adjuvant. Whether the drug effect is direct or indirect is immaterial, since suppression of CRP is associated with subsidence of the disease process.

It appears that CRP and concurrent IgA analyses would be useful indices for the evaluation of the efficacy of drug therapy in tuberculosis and for the prognosis of the disease.

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*When the edge of the diaphragm pinches the celiac axis
it may be pretty hard to find out just what is wrong.*

Celiac Axis Syndrome

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- *Epigastric pain beginning 20 to 60 minutes after meals and accompanied variously by fullness, nausea, vomiting, or diarrhea should be the signal to search for an epigastric bruit. If such is found, do a retrograde aortogram and examine lateral views closely for evidence of compression of the celiac axis, either extrinsic, as in the case to be reported here, or due to atherosclerosis.*

THE clinical and surgical findings of obstruction of the branches of the abdominal aorta have received increasing attention during recent years. As the number of elderly patients increases, surgeons and other clinicians are seeing increasing numbers of cases of abdominal apoplexy from arteriosclerotic or embolic obstruction of the mesenteric vessels. However, another obstructive disease, the celiac axis syndrome, as Harjola called it,¹ may be seen in younger individuals, and its early recognition may save needless repetitive studies and prolonged discomfort for the patient.

Compression of the celiac axis was reported as early as 1917 by Lipschutz,² who found that the diaphragm may cover the origin of the artery. Michels,³ in 1955, confirmed the observation that the diaphragm may constrict the celiac axis.

Morris, Crawford, Cooley, and DeBakey,⁴ in 1962, reported on 12 patients requiring recanalization of the celiac and superior mesenteric arteries. However, their patients were reported as having atherosclerotic obstruction, not external compression of the celiac artery.

The first operative case of obstruction of the celiac axis caused by external constriction was reported by Harjola in 1963⁵. The mechanism was a fibrotic celiac ganglion. Stoney and Wylie,⁶ in 1966, reported fourteen patients with visceral ischemia. Eight of these patients had compression of the celiac axis by the diaphragm. More recently, Harjola¹ has reported 13 patients having the celiac axis syndrome. Three types of external stenosis were identified: constriction of the celiac axis by the celiac ganglion (eight of 13 patients), compression of the axis by the fibrotic margin of the aortic hiatus (four patients), and a combination of both (one patient).

Recently, at the Maui Memorial Hospital, a patient was encountered with the celiac axis syndrome.

CASE REPORT

S. K., a 63-year-old Japanese man, complained of intermittent epigastric pain present since 1962. The pain was characterized as cramping, occurring 20-30 minutes after eating, and not relieved by antacids. Because of a history of hematemesis and of occasional constipation, he had been subjected to four barium enemas and two upper GI series, all of which were reported as normal. In February, 1969, he was examined by a physician who believed that he had an abdominal mass. Therefore, the patient was admitted to the hospital, where an IVP, upper GI series, barium enema with air contrast, and gallbladder series were performed. All of these were again reported as normal.

Physical examination on this admission was considered normal except for a questionable epi-

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gastric mass felt on only one occasion. Auscultation of the abdomen on this admission was not considered significant. As two physicians had believed that they had felt an abdominal mass, the patient was subjected to an exploratory laparotomy on March 24, 1969.

All viscera were normal on palpation. However, in palpating the area of the body of the pancreas, a marked thrill was evident. Inspection and palpation of the arteries at the margin of the small bowel revealed excellent pulsation. However, on palpating the hepatic and gastric vessels, no pulse was discernible. Definitive surgery on the celiac artery was delayed at this point pending an aortogram.

Postoperatively the patient did well and after his recovery a retrograde aortogram was performed via the right femoral artery. Lateral x-rays revealed a marked stenosis of the celiac artery at its takeoff from the aorta (Fig. 1). The superior mesenteric artery appeared normal in caliber.

The patient was discharged from the hospital and readmitted on May 15 for definitive surgery. Careful auscultation of the abdomen on this admission revealed only a slight bruit over the epigastrium.

FIG. 1.—Aortogram showing compression of celiac artery at its origin.

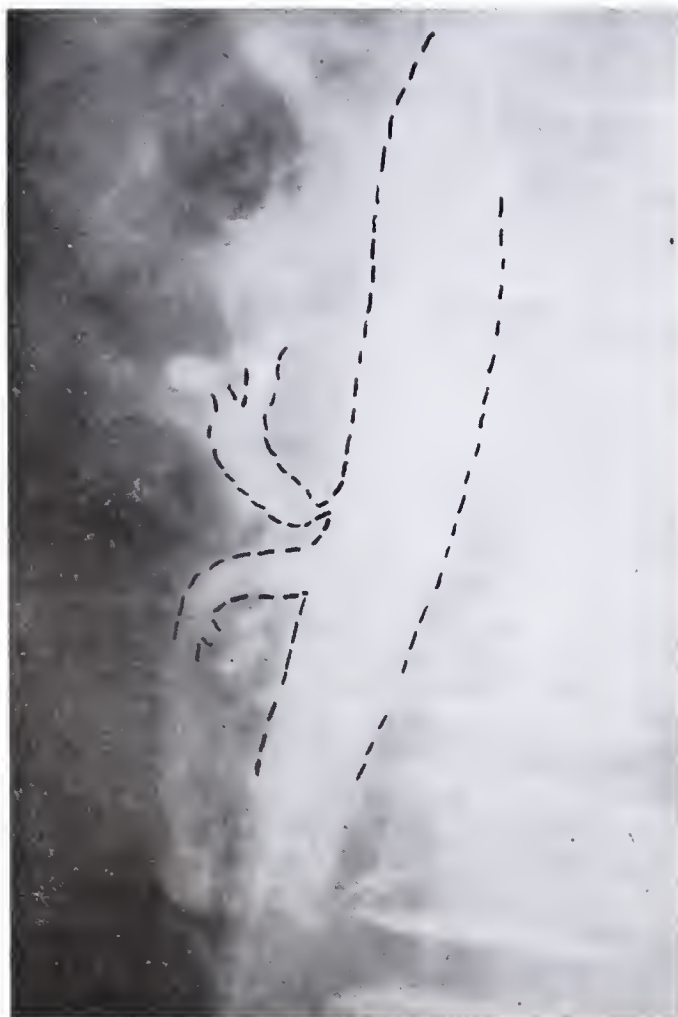
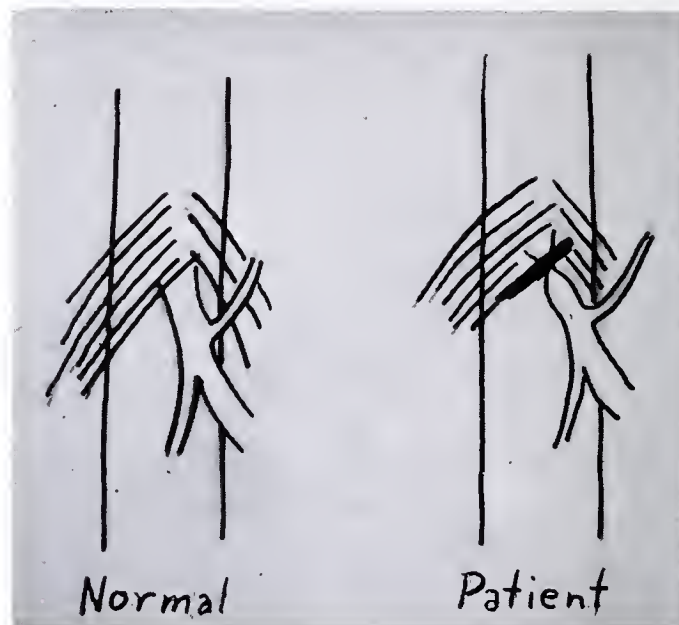


FIG. 2.—Diagram of relationship between diaphragmatic hiatus and celiac artery.



On May 16 the patient was returned to surgery, and the celiac artery was approached through the lesser omentum. The left gastric artery revealed only faint pulsations. By retrograde dissection, the celiac axis was identified with the

FIG. 3.—Postoperative aortogram showing normal diameter of decompressed celiac artery.



finding of a tight band at the edge of the aortic hiatus of the diaphragm, compressing the celiac artery (Fig. 2). This band was cut.

Following the procedure, the patient had an uneventful postoperative course. A repeat aortogram was performed on May 27, and lateral x-rays revealed a normal diameter of the celiac artery (Fig. 3). The patient was discharged on May 28 and has had no further postprandial pain.

DISCUSSION

Compression of the celiac artery with the production of symptoms now constitutes a recognizable picture—the celiac axis syndrome. The patients usually present with a complaint of epigastric pain occurring twenty to sixty minutes after eating.¹ Epigastric fullness, nausea, vomiting, and occasional diarrhea lead to repeated x-ray studies. If these are normal, then the patient may be labeled psychosomatic and subjected to additional years of discomfort. A systolic bruit over the epigastrium should alert the physician to the possibility of stenosis of the celiac artery, and the next study should be a retrograde aortogram with lateral xrays in order to visualize the celiac and superior mesenteric arteries.

If stenosis of the celiac artery is present, then correction is indicated. Exploration through the lesser omentum gives excellent exposure of the celiac axis and the hiatus in the diaphragm. Any external obstruction, as a celiac ganglion or a fibrotic margin of the diaphragm, can then be corrected. If the lesion is an atherosclerotic plaque, then it can be bypassed with a dacron graft from the aorta to the splenic artery, as suggested by Morris.⁴

CONCLUSION

Stenosis of the celiac artery may be a cause of undiagnosed postprandial pain. It is surgically correctable.

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Labels for Allergies

WHEN people coming to the office are found to suffer from drug allergies or potentially life threatening conditions such as bee venom, allergy, diabetes, anticoagulant, prolonged steroid or rauwolfia therapy, we ask them to allow us to put one of the commercially available red stickers indicating this condition on their driver's license, HMSA card and other identifying documents. I suggest one in their car or workshop, too! In case of accidents and many other situations, this information might be quite valuable.

Travel documents also easily could be marked to protect people who might fall ill in foreign countries. If desired, social security numbers could be typed in. This method would seem to protect those without more expensive medical identification documents.

HERMAN P. KRAMER, M.D.

If ADP aggregates platelets at lower concentration than it should, thrombotic disease may be more likely to occur.

Studies on ADP-Induced Platelet Aggregation In Normal and Diseased Groups*

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● A frequently reported problem in the study of platelet aggregation is the considerable individual variation, not yet well understood. Therefore, the purpose of this study was to develop a method that could be used as a tool for the clinical evaluation of patients.

No spontaneous platelet aggregation occurs when 8% trisodium citrate is used as the anticoagulant. Also, there is no significant day-to-day variation of platelet sensitivity to ADP when the blood samples are drawn from individuals in either a resting or fasting state.

In the test, platelet-rich plasma is mixed with various concentrations of ADP. Platelet aggregation is observed under the light microscope.

The lowest concentration of ADP that still caused platelet aggregation in the normal population was 1.0×2^{-13} mg/ml (expressed by 13 in this study). The platelet sensitivity was increased in patients suffering from thrombosis of a cerebral artery, as expected. Several of the patients suffering from diabetes mellitus also showed increased platelet sensitivity to ADP.

ALTHOUGH platelet aggregation in the initial phase of thrombosis has been studied, the details of the mechanisms involved are not well established. Further elucidation of this aggregation phenomenon should lead to a better method for the clinical evaluation and treatment of thromboembolic disease.

In 1960, Hellem¹ described an acidic, dialyzable, heat-stable extract of erythrocytes that caused

TABLE 1.—Reproducibility of platelet aggregation using the present method in four normal cases on five different days.

CASE	AGE	SEQUENTIAL DATE TESTED				
		1st	2nd	3rd	4th	5th
J.H.	25	10	11	10	10	10
N.H.	55	13	13	13	13	13
M.Y.	41	13	13	13	13	13
T.L.	22	9	9	10	9	9

aggregation of platelets. In the following year, Gaarder *et al*² showed by chromatographic methods that this substance was adenosine diphosphate (ADP). Platelets contain a considerable amount of adenosine triphosphate (ATP),³ which under certain conditions is oxidized to ADP. Platelets are thus believed to be a rich source of the aggregating factor. The facts that (1) platelet aggregation generally follows the release of platelet ADP, and that (2) platelet aggregation is inhibited by enzymes which remove ADP from platelet-rich

FIG. 1.—Various patterns of platelet aggregation by ADP —a. Grade 0 → 1.



Kuakini Medical Research Institute and Kuakini Hospital.

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FIG. 2.—Various patterns of platelet aggregation by ADP —b. Grade II.



FIG. 3.—Various patterns of platelet aggregation by ADP —c. Grade III.

plasma, lend support to this hypothesis. Macmillan⁴ suggested that platelet aggregation in citrated plasma occurred in two phases following an increase of ADP concentrations. The first was due to the direct result of the addition of an aggregating substance. Such an aggregation is reversible and the platelets seemed to remain intact. The second phase, which proceeded irreversible aggregation, was accompanied by the release of ADP from aggregated platelets. Further release, as seen by the addition of ADP, was responsible for the final phase of platelet aggregation.

Some difference between normal individuals and certain patient groups, in platelet sensitivity to ADP, was expected. Emmons and Mitchel⁵ noticed enhancement of platelet clumping during certain postoperative periods, although O'Brien⁶ demonstrated considerable day-to-day differences in some individuals.

The present study was undertaken to develop a method of detecting individuals who may have tendencies toward thrombotic disease as well as those who have had such illnesses.

MATERIALS AND METHODS

Blood samples were obtained from 82 normal men, as well as five cases of myocardial infarction, 13 cases of diabetes mellitus, and 21 cases of cerebral thrombosis. Venous blood was drawn with disposable syringes fitted with siliconized stainless steel #19 gauge needles. The samples were mixed with anticoagulant (one part 8% trisodium citrate solution to nine parts blood) in 15-ml disposable plastic centrifuge tubes. This was the anticoagulant of choice because it allowed collection of platelet-rich plasma without any evidence of spontaneous platelet aggregation. The platelets were easily aggregated in the test tube by gentle agitation with sodium heparin (final concentration, 100 units per ml). The addition of ADP did not cause platelet aggregation when disodium ethylenedinitrilotetraacetate (EDTA) (final concentration, 0.1%) was used. The platelet-rich plasma (PRP) was obtained by centrifugation at 800 rpm/min for 30 min at 4° C. The supernatant PRP was decanted into clean plastic test tubes, which were immersed in an ice bath during the test and used within

FIG. 4.—Various patterns of platelet aggregation by ADP —d. Grade IV.

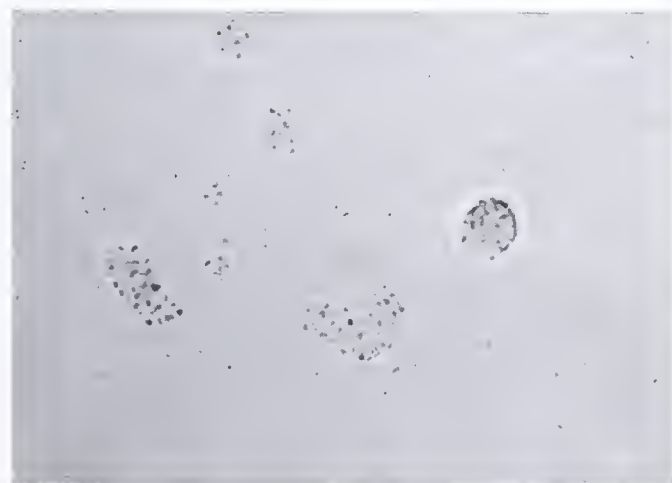
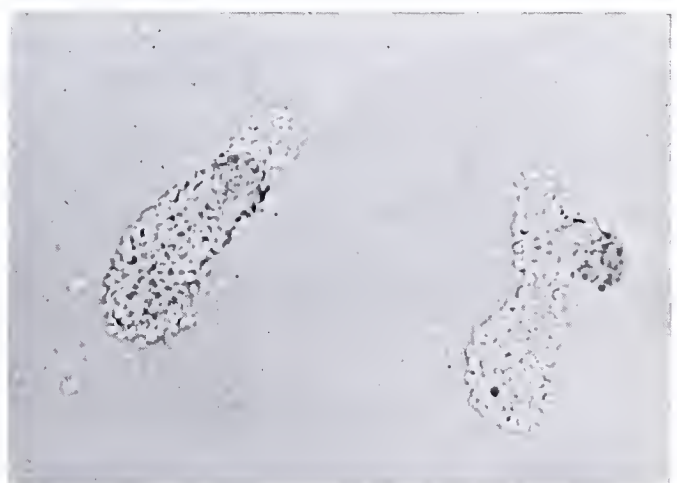


FIG. 5.—Various patterns of platelet aggregation by ADP —e. Grade V.



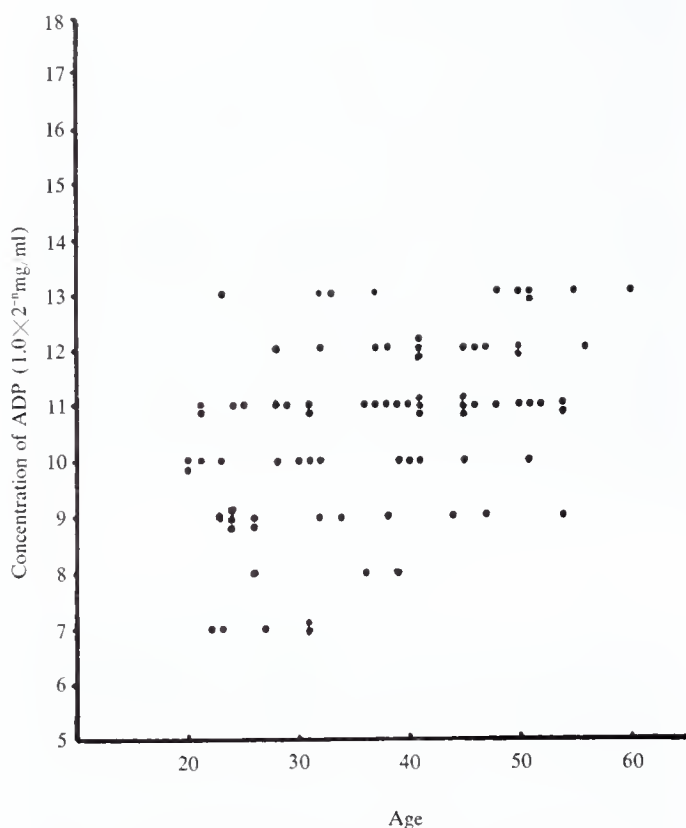


FIG. 6.—ADP sensitivity of platelet in normal groups.

three hours after venipuncture. The stock ADP solution was prepared by dissolving 10 mg ADP (Calbiochem, Los Angeles, Calif.) in 10 ml of THAM buffered solution (Fisher Scientific Co., Fair Lawn, N.Y.). Aliquots of this solution were dispensed into small test tubes and kept frozen at -20°C . The working solutions consisted of 18 serial two-fold dilutions of the stock ADP. The tubes were numbered "1" through "18," and these corresponded to 1.0×2^{-1} through 1.0×2^{-18} mg per ml of ADP, respectively. The serological pipets, microscope slides and small test tubes (12 mm x 75 mm) used in this study were siliconized with Siliclad (Clay-Adams, Inc., New York, N.Y.). Equal sized drops of the PRP and the ADP working solution were mixed in a small test tube and agitated for one minute with a Vortex Jr. mixer (Scientific Industries, Inc., Springfield, Mass.). The mixture was then placed on a microscope slide and covered with a disposable plastic cover slip. The platelet aggregation was observed microscopically at $400\times$ magnification, using a standard light source.

RESULTS

The ADP-induced platelet aggregations showed a variety of patterns which varied according to the concentration of the added ADP. The various

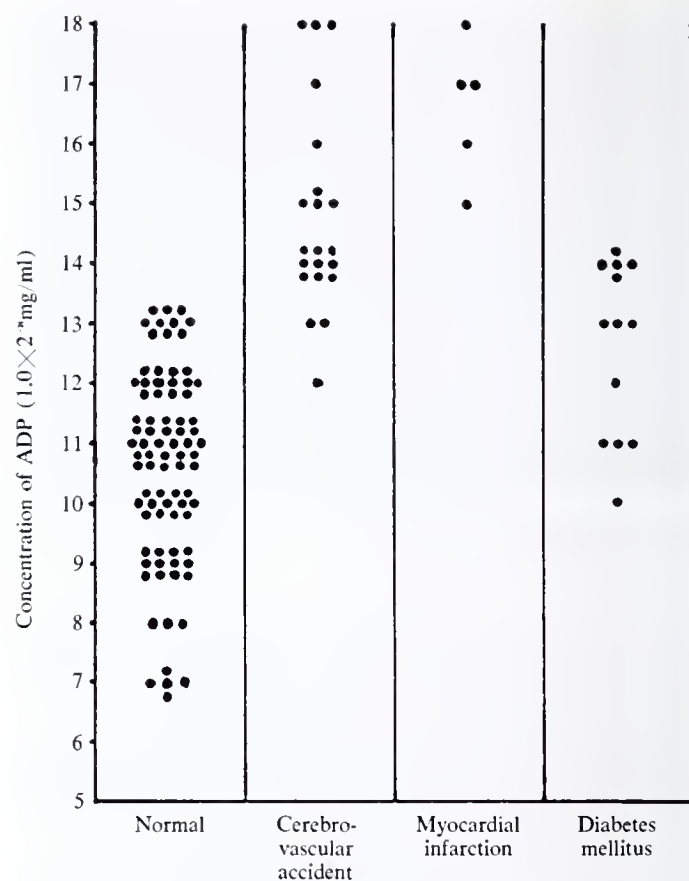


FIG. 7.—ADP sensitivity of platelet in normal and diseased groups.

patterns were arbitrarily classified into six grades (Figs. 1-5). Grade I consisted of clumps of three to five platelets scattered among free platelets. Grade II consisted of small masses of the clumps as seen in grade I, scattered among free platelets. Grade III consisted of similar masses with only a few free platelets. Grade IV showed large masses of platelets; and Grade V consisted of large platelet masses with linear margins. Grades 0 and I were considered as negative, and Grades II and higher as positive.

The above method was found to be reproducible in three volunteers who were tested on five different days (Table 1). The ADP sensitivity of platelets from normal individuals is shown in Fig. 6. The lowest concentration of ADP that caused platelet aggregation was 13 (0.2×10^{-13} mg/ml) and the highest was 7. Although the normal group showed a wide variation of sensitivity, none was sensitive at a concentration of 14 or higher.

Patients with either cerebral thrombosis or myocardial infarction showed platelet aggregation at low concentrations of ADP (Fig. 7). Patients who suffered from the disease within one year showed higher platelet sensitivity of ADP than those who had a stroke more than a year prior to testing. Five of the 14 patients with diabetes mellitus showed high sensitivity of ADP.

DISCUSSION

One of the problems encountered in the study of platelet aggregation is the significant individual variations. Harrison *et al*⁷ noted only a little variation between samples taken at 10 minute intervals, despite differences in the venipuncture technique and duration of venous stasis. However, there were marked differences when the same individuals were tested at intervals of seven days. These investigators found that normal resting subjects show little change despite gross enhancement of the platelet clumping response following exercise, before surgical operations, and during mental stress.

In contrast to the significant day-to-day variation reported by O'Brien *et al*⁶ and Harrison *et al*,⁷ we found little difference between resting and fasting subjects. Similarly, there was little difference when a relatively high concentration (8%) of trisodium citrate was used as the anticoagulant. Heparin proved to be unsatisfactory because it induced spontaneous aggregation, and EDTA was unsatisfactory because it inhibited aggregation induced by ADP. The lowest concentration of ADP required to cause aggregation in the normal population, regardless of age, was 13. Within the 30 to 40 year age group, in some cases, the concentration of ADP was found to be as high as 1.0×2^{-7} mg/ml, required for platelet aggregation, whereas the individuals between the ages of 60 and 80 demonstrated aggregation initiated with a much lower ADP concentration.

The aggregation of platelets from patients who suffered from cerebral arterial thrombosis or myocardial infarction was induced by a very low concentration of ADP. It was also noted that there was a difference in sensitivity between patients

who had suffered a cerebral thrombosis recently (within one year) and those who had suffered thrombosis less recently (over one year). Hampton *et al*⁸ and O'Brien⁹ showed that various hypotensive or vasodilating agents and anti-inflammatory agents will inhibit platelet aggregation. It must therefore be kept in mind that the results of this test can be modified both by drugs and by other substances in the plasma.

The incidence of thrombotic disease is much higher in patients with diabetes mellitus than in nondiabetics. Thus it is not surprising that some of the diabetics tested showed platelet sensitivity to relatively low ADP concentrations. This method may provide an indication of a possible increased risk of thrombosis in diabetic patients.

ACKNOWLEDGMENT

The authors are indebted to Dr. Frederick Shepard, Medical Director of the Rehabilitation Center of Hawaii, for his arrangement in obtaining patient blood samples.

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*Abortion increases the risk of Rh sensitization
and there is an effective prophylactic against it!*

The Role of RhoGAM* in Therapeutic and Spontaneous Abortion

CLARE SPRAGUE, M.D., Honolulu

● *It is hoped that by the selective use of Rhogam in first and second trimester abortion cases, and in particular following instrumented abortion, the incidence of erythroblastosis fetalis can be further decreased.*

THERE ARE questions, as yet unanswered, concerning the risk of Rh sensitization from abortion in Rh-negative women. Evidence exists that sensitization can occur, and it has thus been recommended that RhoGAM be administered to prevent this possibility in unsensitized Rh-negative women who desire to have more children.

Hematopoiesis begins in the embryo at approximately eighteen days of gestational development. Fetal erythrocytes have been found in the maternal circulation in the early part of pregnancy, and as pregnancy progresses, increasing numbers of fetal erythrocytes are often present.

A recently published work in England has further documented the existence of fetal erythrocytes in the maternal circulation in abortion cases.¹ In spontaneous abortion, transplacental hemorrhage (defined in this study as one or more fetal cells per 100 low power microscopic field, as determined by the Kleihauer smear technique) was found in 9/157 (5%). However, following therapeutic abortion by the vaginal route, 30/118 (26%), and by the abdominal route, 25/103 (25%) were found to have fetal-maternal transfusion. In 3% of the therapeutic abortion cases, the number of fetal cells was at or above the potentially immunizing level of 0.25 ml (25 fetal cells per 100 low power fields). These authors concluded that the risk of transplacental hemorrhage in early spontaneous abortion seems to be small and perhaps insignificant, but that following artificial termination of pregnancy, potentially immunizing hemorrhages frequently occur.¹ A study of Rh-negative women at term has shown that in the prepartum period, 58/144 (35%), and in the early postpartum period, 87/155 (56.1%) were found to have significant numbers of fetal erythro-

cytes in the maternal circulation.²

Fetal erythrocytes contain Rh antigens and are thus antigenically competent as early as 38 days of life.³ It is probable that sequestration of "old," Rh-positive, antigenically competent fetal erythrocytes by the maternal spleen is necessary for antibody formation.⁴ The amount of antibody formed is related to the quantity of fetal blood sequestered, and there is evidence that antibody production may be a cumulative process. In some cases, several incompatible abortions or pregnancies may be necessary to evoke a significant antibody response. The estimated risk at term of Rh sensitization from a single Rh-positive, ABO-compatible pregnancy is approximately 16%, even though as previously stated, significant numbers of fetal erythrocytes are present in over 50% of women soon after delivery.

There are several factors which may keep the sensitization potential low in early spontaneous abortion. Many abortuses are chromosomally and morphologically abnormal and have absent or incomplete hematopoiesis. Chromosome anomalies have been found in from 8% to 40% (average 21%) in 13 unselected series totalling 811 specimens.⁵ In a cytogenetic abortion study at Kapiolani Maternity and Gynecologic Hospital by Waxman and Arakaki⁶ 63/127 (49.5%) of abortuses successfully cultured were found to have abnormal chromosomes. Many of these chromosomally abnormal products of conception are blighted or abnormal conceptuses which, lacking fetal RBCs, could not produce an Rh antigenic stimulus even if some of the embryonic tissue were to gain access to maternal circulation. The other pathologic changes frequently associated with spontaneous abortion, such as necrosis and inflammation, would also be expected to hamper the transplacental transmission of erythrocytes even if they were present in the embryo.

The spontaneous abortuses for which other than genetic-morphologic factors are responsible—in particular, those occurring late in the first trimester and in the second trimester—would be expected to carry a progressively higher risk of sensitization. However, the overall risk factor is probably much lower than that in a third trimester

* RhoGAM—Rh₀(D) Immune Globulin (Human)
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delivery of an Rh-incompatible infant, because of the lower volume of fetal-maternal blood transfer.

Sensitization induced by abortion is a real possibility, although the risk cannot be predicted accurately at present. Since RhoGAM is a safe and effective means of preventing sensitization, it is advisable to consider its use following therapeutic abortions, and probably also following spontaneous abortions, in particular those in which surgical instrumentation has been necessary, because the trauma of surgery may in itself allow more fetal erythrocytes to enter the maternal circulation.

RhoGAM has been successfully administered to 290 patients in this institution, without complication. Its use in large series of cases in other institutions and in many countries suggests that there is virtually no risk to the mother. Even when it is given to the mother during the pregnancy rather than following its termination, there is no apparent risk to the mother or to the unborn infant.⁷ In abortions during the second trimester, whether therapeutic or spontaneous, it would be advisable to obtain blood from the fetus if possible for Rh

typing, and direct Coombs test if the mother is Rh negative. RhoGAM should then be given only if the fetus is Rh positive and the mother Rh and Du negative, no evidence of maternal Rh antibody is found, and the RhoGAM crossmatch is compatible. In first trimester abortion it will not be possible to obtain fetal blood for Rh typing. The necessary testing will thus be limited to confirmation of maternal Rh negativity (including absence of Du), maternal antibody screening to rule out Rh antibodies, and a compatible RhoGAM crossmatch with maternal RBCs.

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COOPER HOSPITAL QUIZ

Archives of Internal Medicine (February), 1970

- (1) Pulmonary embolism is most apt *not* to produce classic clinical manifestations. However dyspnea is present in 100% of the patients. TRUE or FALSE
- (2) The usual pulmonary embolus rarely resolves rapidly or completely. TRUE or FALSE
- (3) Patients with overt heart disease are apt to get less blood flow return after pulmonary embolization than patients with normal hearts. TRUE or FALSE
- (4) In mitral stenosis when the pulmonary capillary pressure rises and alveolar fluid collects the resultant *symptoms* are those of heart failure not abnormal lung function. TRUE or FALSE
- (5) In patients with mitral stenosis and coexisting pulmonary fibrosis pulmonary edema may be present when the left atrial pressure elevation is not sufficient to cause edema (in mitral stenosis alone). It is postulated that the compromise of lung lymphatic drainage is the factor that causes the pulmonary edema to occur. TRUE or FALSE
- (6) Declinax, a postganglionic sympathetic blocking agent, is most effective in the treatment of hypertension if combined with diuretics. TRUE or FALSE
- (7) Declinax works by preventing the release of norepinephrine from stores at the neuroeffector site. TRUE or FALSE
- (8) Enterococcal endocarditis treatment is quite different from the treatment of endocarditis caused by other streptococci. Even though the enterococci are resistant to penicillin and/or streptomycin, if these drugs are given in combination there is a synergistic effect that makes them most effective. TRUE or FALSE
- (9) Enterococcal endocarditis occurs with increased frequency in elderly men and women of child-bearing age. TRUE or FALSE
- (10) Blood pressure elevation in patients with benign renovascular hypertension can be easily explained in terms of increased angiotensin or aldosterone production. TRUE or FALSE

Answers will begin on page 522.

*Uterine leiomyosarcomas are rare tumors
with a very grave prognosis.*

Leiomyosarcoma of the Uterus

Current Case Reports

Review of All Cases in Honolulu, 1955-1965

Review of the Literature

WILLIAM H. HINDLE, M.D.,* CLARE SPRAGUE, M.D.†

and G. PATRICK SHAW, M.D.,† Honolulu

FOUR CASES at Kapiolani Maternity and Gynecological Hospital, Honolulu, Hawaii, illustrate the difficulties of exact pathologic diagnosis and complexities of clinical management of leiomyosarcoma of the uterus. A ten-year review and follow-up of documented cases of leiomyosarcoma of the uterus in Honolulu demonstrates the various clinical patterns and vague correlation with microscopic classification of these unusual and variable tumors. A review of the literature reveals a diversity of opinion as to the criteria for pathologic diagnosis and appropriate clinical management.

CLINICAL CASE HISTORIES

Kapiolani Hospital #69-1585: This 31-year-old Japanese woman, gravida 2, para 2, AB 0, had been followed for 6 years for endometriosis and had had a good subjective response to cyclic hormone therapy (Enovid). In early January, 1969, a small uterine "myoma" was noted on routine pelvic examination. During the next 2½ months this mass grew rapidly, and became tender to palpation. Prior to admission, the patient noted the onset of dull, intermittent right lower quadrant and suprapubic pain. At laparotomy a firm, well circumscribed 5 cm mass was noted in the right cornual area of the uterus. Total hysterectomy was done. On section the mass had a bulging, tan-pink,

semitranslucent appearance, and was well circumscribed and easily differentiated from the surrounding myometrium. Final pathologic diagnosis was leiomyosarcoma, grade 1.

Kapiolani Hospital #69-2091: This 43-year-old nulliparous Japanese woman had a three-year history of multiple uterine myomata by pelvic examination. For 4-6 months prior to admission she had noted menstrual irregularity, severe premenstrual abdominal cramps and pelvic pressure. Progressive uterine enlargement was noted on repeated examination, and surgery was advised. At laparotomy the uterus was found to be enlarged x 3 and irregular. Its serosal surface was studded with numerous firm nodules up to 4 cm in diameter. Total hysterectomy and bilateral salpingo-oophorectomy were done. On section the serosal nodules had a firm pale appearance. In the myometrium an 8-cm mass was noted, well circumscribed and separate from the surrounding myometrium. The surface, on section, was tan-pink with gray irregular bands separating the softer tan-pink areas. Several areas of cystic degeneration were noted. There was no gross evidence of hemorrhage or softening of the tumor mass. Final pathologic diagnosis was leiomyosarcoma, grade 1.

Kapiolani Hospital #69-1788: This 43-year-old Caucasian woman, gravida 6, para 6, AB 0, had a three-month history of metrorrhagia and was admitted for diagnostic D&C. Examinations prior to admission revealed a progressively enlarged anterior cervical lip which felt cystic to palpation.

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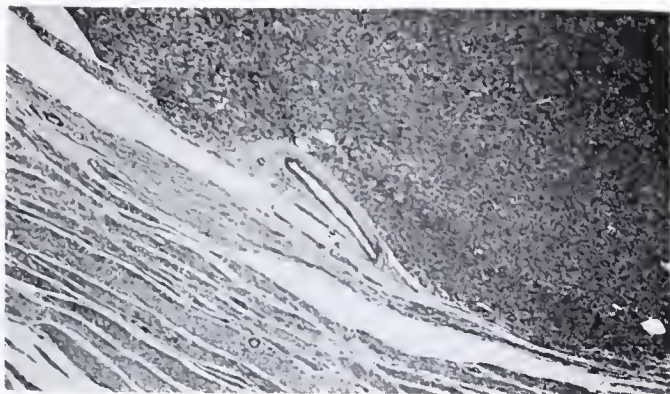


FIG. I, CASE A.—A. Kap. Hosp. 69-1585 Path. No. S69-574. Section from Hysterectomy. x50.

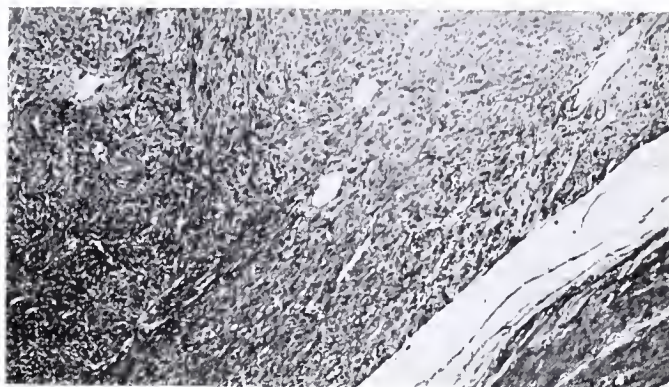


FIG. II, CASE B.—B. Kap. Hosp. 69-2091 Path. No. S69-779. Section from Hysterectomy. x100.



FIG. I, CASE A.—B. Kap. Hosp. 69-1585 Path. No. S69-547. Section from Hysterectomy. x100.



FIG. II, CASE B.—C. Kap. Hosp. 69-2091 Path. No. S69-779. Section from Hysterectomy. x450.

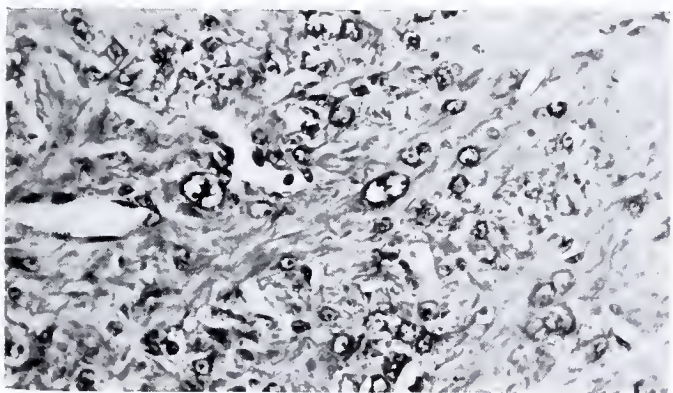


FIG. I, CASE A.—C. Kap. Hosp. 69-1585 Path. No. S69-547. Section from Hysterectomy. x450.

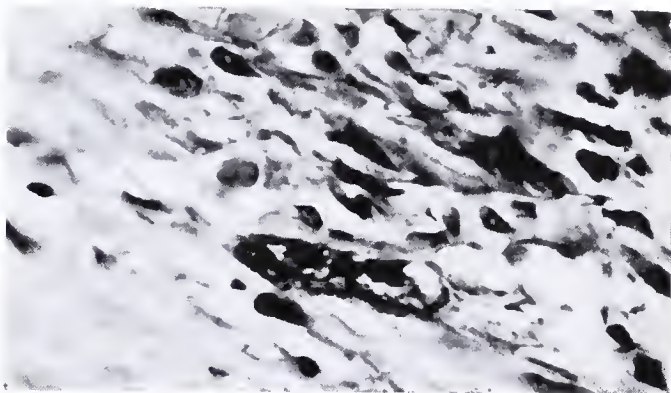


FIG. II, CASE B.—D. Kap. Hosp. 69-2091 Path. No. S69-779. Section from Hysterectomy. x1000-oil.

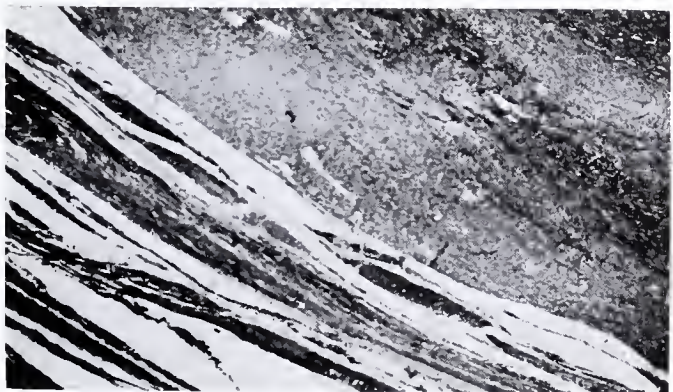


FIG. II, CASE B.—A. Kap. Hosp. 69-2091 Path. No. S69-779. Section from Hysterectomy. x50.

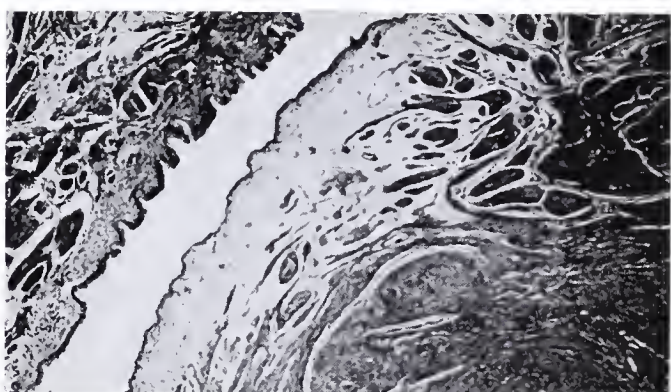


FIG. III, CASE C.—A. Kap. Hosp. 69-1788 Path. No. S69-640. Section from Uterine Cervix. x50.

The hypertrophic anterior cervical lip was excised. On section the specimen had a soft tan-pink surface and contained a cystic structure measuring 2 cm in diameter. Final diagnosis was leiomyosarcoma, grade 1, completely excised. Total hysterectomy and bilateral salpingo-oophorectomy were done. The uterus revealed no residual tumor.

Kapiolani Hospital #68-5364: This 42-year-old Japanese woman, gravida 2, para 2, AB 0, was first admitted in July, 1965 because of hypermenorrhea of three or four months' duration. Pelvic examination revealed the uterus to be slightly enlarged, smooth and quite firm. Curettage yielded endometrial tissue "which appeared different than usual" and a large amount of tissue that appeared to be cervical in origin. Microscopic examination revealed proliferative endometrium and a degenerating myomatous tissue suggestive of a degenerating polyp or submucous leiomyoma. She was readmitted in January, 1966 because of recurrent hypermenorrhea, and total hysterectomy was done. The uterus weighed 200 grams and contained a submucous leiomyoma measuring 4 cm in diameter.

She was readmitted in September, 1967 with a four-month history of sharp, intermittent lower abdominal pain, occasional dyspareunia and painful defecation, and urinary frequency. On pelvic examination a firm, tender mass was felt extending across the apex of the vagina. At laparotomy an eight-cm, soft, necrotic mass was found, involving the right lateral and posterior pelvic walls and the right ureter, and extending laterally to the right external iliac artery. Frozen section was reported as malignant, probably sarcoma. Bilateral salpingo-oophorectomy and excision of the mass were done. Permanent sections of the mass were reported as retroperitoneal tumor, myxoid sarcoma.

Chemotherapy with 5-FU was instituted. Her general course was one of gradual deterioration. She was readmitted on four occasions for symptomatic treatment and expired on 10-1-68. Autopsy revealed well differentiated leiomyosarcoma of the pelvic structures and lower retroperitoneal area with direct involvement of the large and small bowel and ureters.

DISCUSSION

The diagnostic criteria for low-grade leiomyosarcoma are not clear cut or widely agreed upon. Cases No. #69-1585 and #69-2091 are good examples of low-grade leiomyosarcomas presenting grossly as well-circumscribed leiomyomas. Whether these lesions arose in cellular leiomyomas or spontaneously is uncertain, and could not have been established without previous biopsy. Both of these cases fulfill the histologic criteria of malignancy of Spiro and Koss;⁷ nuclear abnormalities; occasional enlarged, hyperchromatic nu-

clei with large nucleoli; and multinucleated giant tumor cells; but fail to meet the criterion of Taylor and Norris,^{4,5} of more than ten mitotic figures per ten high power fields.

Case #69-1585 presented grossly as a cervical mass, and despite the fact that it was less well circumscribed, no evidence of invasion of contiguous structures was found: it appeared to be confined to the cervical biopsy specimen. It also was a low-grade leiomyosarcoma, fulfilling the criteria of nuclear abnormalities and showing a mitotic rate of from eight to ten mitotic figures per ten high power fields.

Case #69-2091 is of particular interest because it was a low-grade leiomyosarcoma which by its fatal outcome and the availability of previous biopsy material provides the opportunity to test the criteria of malignancy and also the possibility of origin from a leiomyoma. The original curettage specimen showed myxomatous changes in irregular polypoid fragments with extensive necrosis, and only remnants of small spindle-shaped nuclei could be identified. This lesion, originally thought to be a degenerated polypoid leiomyoma, even in retrospect does not meet criteria of malignancy. However, it was not viable tissue, so pathologic study could not be conclusive. In the mass subsequently removed by hysterectomy, although some viable tumor tissue was available for study, only slightly atypical nuclei were occasionally seen. This lesion, although probably not adequately sampled, does not meet malignant criteria. The subsequent biopsy material from the pelvic retroperitoneal mass and autopsy material from the pelvic mass showed a similar cellular pattern of small spindle-shaped cells. However, there was more nuclear atypism and a mitotic rate of eight to ten per ten high power fields. There were areas of necrosis and myxomatous change, less atypical in appearance than the more cellular areas, resembling closely the original biopsies. This case supports the diagnostic criteria of Spiro and Koss⁷ because, even though the neoplasm killed the patient, it still did not meet the mitotic criterion of Taylor and Norris, of ten mitoses per ten high power fields. The possibility of origin from a benign lesion exists, although, lacking sufficient viable material and in particular the margins of the myometrial mass in the hysterectomy specimen, this question is not settled.

In general terms, the prognosis is primarily related to the gross presentation of the tumor and to the grade of malignancy. Those tumors which present as well circumscribed masses of low grade malignancy, have a relatively good prognosis. Those that present a diffuse growth pattern and especially those with a high grade of cytologic malignancy have a very poor prognosis.

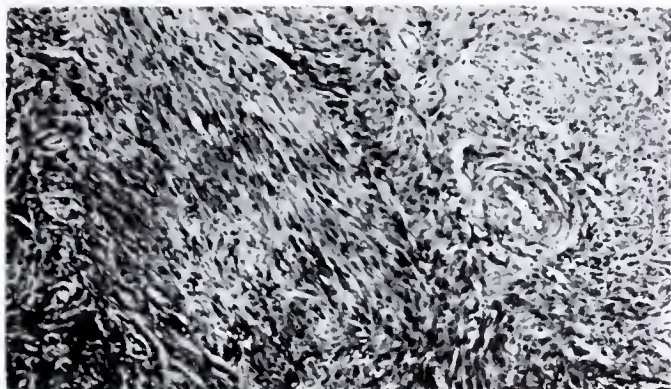


FIG. III, CASE C.—B. Kap. Hosp. 69-1788 Path. No. S69-640, Section from Uterine Cervix, x100.

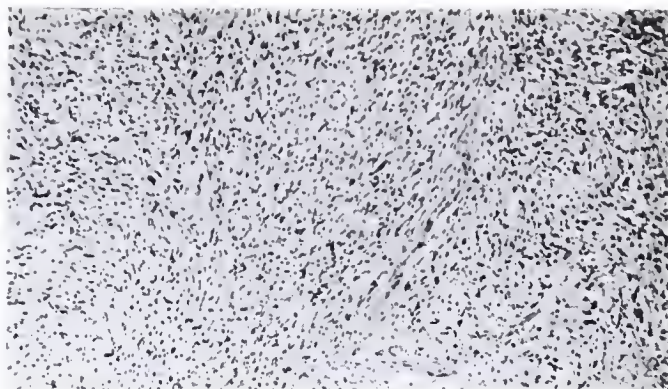


FIG. IV, CASE D.—B. Kap. Hosp. 68-5364 Path. No. S66-24, Section from Hysterectomy, x100.



FIG. III, CASE C.—C. Kap. Hosp. 69-1788 Path. No. S69-640, Section from Uterine Cervix, x450.



FIG. IV, CASE D.—C. Kap. Hosp. 68-5364 Path. No. A68-58, Section from Autopsy, x100.

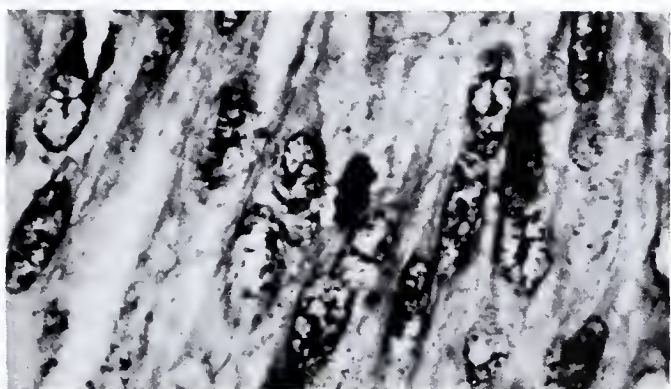


FIG. III, CASE C.—D. Kap. Hosp. 69-1788 Path. No. S69-640, Section from Uterine Cervix, x1000-oil.

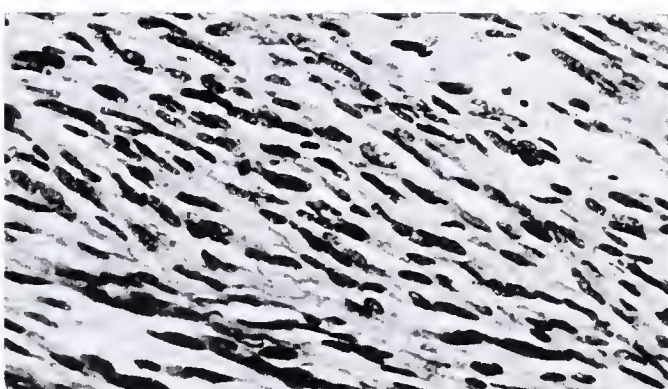


FIG. IV, CASE D.—D. Kap. Hosp. 68-5364 Path. No. A68-58, Section from Autopsy, x450.

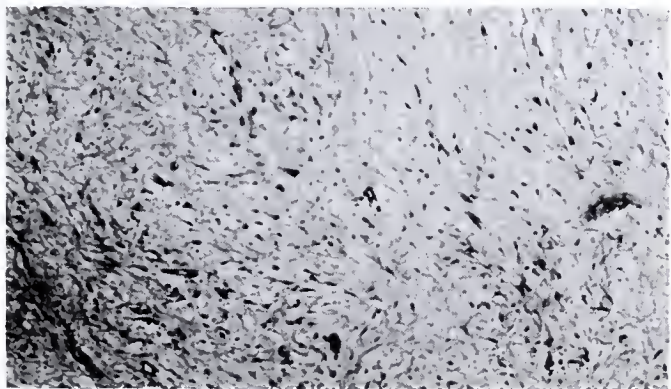


FIG. IV, CASE D.—A. Kap. Hosp. 68-5364 Path. No. S65-1145, Section from curettage, x100.



FIG. IV, CASE D.—E. Kap. Hosp. 68-5364 Path. No. A68-58, Section from Autopsy, x1000-oil.

HISTORICAL REVIEW

In 1860, Meyer¹ described a case of sarcoma of the uterus. In 1865, Virchow² formalized the pathologic diagnosis of this entity. Williams³ report in the United States did not appear until 1894. These uncommon tumors present a continuing challenge to both the pathologist and the clinician.

Sarcoma of the uterus must be differentiated from (1) mixed mesodermal tumors; (2) carcinosarcoma; and (3) sarcoma botryoides.^{4,5} Histologically, uterine sarcoma may be of spindle, round, mixed, or giant cell-type.⁵ The tumor may be located in a myoma, the endometrial stroma, the myometrium (muscular-fibrous), or the cervix.⁶

Sarcoma of the uterus constitutes about 1.3%⁷ to 4%^{5,8} of all uterine malignancies, although some authors report as low an incidence as 0.5%.⁹ The ratio of sarcoma of the uterus to adenocarcinoma of the uterus is between 1:20⁹ and 1:40.¹⁰ Uterine myomas removed surgically show sarcomatous change in approximately 0.36%¹¹ to 0.77%.¹² Sarcoma originating in a myoma comprises about 65%⁵ of all uterine sarcomas.

Most authors¹³⁻¹⁶ agree that there is a positive correlation between the number of mitotic figures and the malignancy of these tumors. With proper treatment, sarcoma confined within a myoma has a much better prognosis than other uterine sarcomas. Five-year survival rates as high as 80%¹⁴ or even 100%⁷ have been reported in cases of sarcoma confined to a myoma; but if the sarcoma has extended beyond the myoma, five-year survival rates fall to below 20%.⁷ The over-all five-year survival rate of those treated is approximately 50%. The over-all five-year survival rates of all uterine sarcomas are 20%-30% after treatment.^{5,6,11,17} Five-year survival does not appear to be correlated with age or parity.

Endometrial stromal sarcoma of the uterus often presents as a polypoid mass, sometimes prolapsed through the cervix.⁶ The five-year survival rate of treated cases is reported as 15%.¹³ Myometrial (muscular-fibrous) sarcomas are more common than the endometrial type by a ratio of 3:1.¹⁶ The prognosis for cervical sarcoma is very poor, with five-year survivals of 10%-20% reported. In cervical sarcomas, preoperative radiation treatment is advisable,⁶ whereas surgery is the treatment of choice for the other uterine sarcomas.

CLINICAL FEATURES

Sarcoma of the uterus is a disease primarily of women from 40 to 50 years of age at the time of onset of their symptoms.^{5,16} In about 75% of patients, there is abnormal uterine bleeding or

bloody discharge.¹⁷ Preoperative diagnosis is unusual. Even if dilatation and curettage of the uterus are included as a preoperative diagnostic procedure (before definitive surgery), as few as 40% of these tumors may be diagnosed before treatment.¹⁷ Positive cervical cytology has been reported in as high as 60% of these tumors,¹⁷ but a 37% incidence of positive cytology is closer to that noted in most series.

Accepted treatment of uterine sarcoma is total abdominal hysterectomy and bilateral salpingo-oophorectomy. These tumors spread by blood-borne metastasis (most commonly to the lungs and liver) and by eventual local extension. In selected young patients in whom the tumor appears completely contained in the uterus and to have been totally resected, the ovaries may be left in place,^{10,15,18} as the incidence of metastasis to the ovaries is less than 3%-4%.¹⁹

Honolulu Cases, 1956-65

A search was made for all cases of sarcoma of the uterus in Honolulu's four major civilian hospitals (Kaiser-Permanente, Kapiolani, Queen's, and St. Francis) occurring during the ten-year period 1956 through 1965. During this interval, 26,585 gynecologic discharges, excluding incomplete abortions, were recorded. There were 499 cases of adenocarcinoma of the endometrium and 16 cases of sarcoma of the uterus. The ratio of sarcoma of the uterus to total discharges was 1:1662. The ratio of adenocarcinoma of the uterus to sarcoma was 31:1. In those hospitals where figures were available, the ratio of sarcoma of the uterus to myomata of the uterus (pathologic diagnosis) was 1:392, or 0.26%.

The 16 cases are summarized as follows:

1. No. 1045-56. 1956. 60-year-old Hawaiian woman. History: vaginal bleeding and pain for one week. Diagnosis: Leiomyomata and sarcoma of the uterus with metastasis to adjacent omentum and suppurative inflammation, peritonitis, and pelvic abscess. Subtotal hysterectomy. Died with metastatic disease.

2. No. 57-1007. 1957. 48-year-old Caucasian woman. Preoperative symptoms: menometrorrhagia. Preoperative diagnosis: myomata uteri. Total abdominal hysterectomy and BSO. Pathologic diagnosis: leiomyosarcoma arising in myomata uteri. Postoperative treatment with radiation therapy. Died 1957, with metastatic leiomyosarcoma.

3. No. 573455. 1957. 64-year-old Caucasian woman. Diagnosis: endometrial sarcoma by biopsy. Treated for anemia and given supportive care. Lost to follow-up.

4. No. 851-57. 1957. 53-year-old Chinese woman. History: abdominal pain for one month. Total abdominal hysterectomy and BSO. Patho-

logic diagnosis: leiomyosarcoma of uterus arising in one of multiple myomata. Died 1961, with metastatic disease.

5. No. 603407. 1960. 50-year-old Japanese woman. Preoperative diagnosis: myomata uteri. D & C and total abdominal hysterectomy and BSO. Pathologic diagnosis: leiomyosarcoma in myoma.

6. No. 1G12331. 1961. 28-year-old Hawaiian woman, gravida 8, para 6, AB2. Admitted for myomectomy. Three-month history of pelvic pain. Pap smear negative. D & C negative. Pathologic diagnosis: leiomyosarcoma in a myoma. Subsequently had total abdominal hysterectomy and BSO. Uterus revealed no residual sarcoma. Readmitted in 1964 with a 16-week gestation size pelvic mass. Biopsy revealed low-grade leiomyosarcoma. Treated with x-ray external therapy with no change in the size of the mass. Metastasis to the lungs. Died of pulmonary edema.

7. No. FED17896-2-609. 1961. 35-year-old Caucasian woman, para 4. Pap smear negative. Abdominal hysterectomy and left salpingo-oophorectomy. Multiple myomata present. Pathologic diagnosis: low-grade leiomyosarcoma in leiomyoma. Alive and well 1968.

8. No. 61-2912. 1961. 42-year-old Chinese woman. Increasing size of pelvic tumors. Pap smear negative. Preoperative diagnosis: myomata uteri. Myomectomy and total abdominal hysterectomy. Pathologic diagnosis: leiomyosarcoma arising in a leiomyoma. Lost to follow-up.

9. No. 62-4072. 1962. 60-year-old Filipina. Preoperative diagnosis: myomata; rule out ovarian tumor. D & C negative. Pap smear negative. Total abdominal hysterectomy and left salpingo-oophorectomy. Pathologic diagnosis: multicentric leiomyosarcoma, with no myomata. Died 1964, with metastatic leiomyosarcoma.

10. No. 22477. 1963. 39-year-old Caucasian-Hawaiian, gravida 3, para 3. Complained of pelvic pain and pressure. Pap smear negative. Preoperative D & C negative. Abdominal hysterectomy. Pathologic diagnosis: low-grade leiomyosarcoma in myoma, with multiple myomata uteri. Alive and well 1968.

11. No. A22971-1. 1963. 43-year-old Chinese woman, gravida 2, para 2. Enlarging pelvic mass and menorrhagia. Pap smear negative. Abdominal hysterectomy. Pathologic diagnosis: low-grade leiomyosarcoma arising in myomata, with multiple myomata uteri. Alive and well 1968.

12. No. 1G36138. 1964. 47-year-old Caucasian-Hawaiian woman, gravida 2, para 2. D & C negative. Abdominal hysterectomy. Pathologic diagnosis: multiple myomata with low-grade leiomyosarcoma arising in a myoma. Alive and well 1968.

13. No. 65-5045. 1965. 36-year-old Chinese woman. D & C and conization of cervix for menorrhagia, postcoital bleeding, and six-month history of uterus enlarging to 10-week gestation size. Preoperative diagnosis: myomata uteri. Pathologic diagnosis: sarcoma, probably arising in leiomyomata. Abdominal hysterectomy and BSO. Subsequent recurrent disease and external radiation therapy. Died with metastatic sarcoma.

14. No. 13965-5. 1966. 14-year-old Filipina. Menorrhagia and metrorrhagia for two months. Large polypoid growth protruding from the cervix. D & C and biopsy of mass, with diagnosis of leiomyosarcoma. Preoperative radium with capsules into the uterus, followed by total abdominal hysterectomy and BSO. Pathology revealed residual invasive sarcoma in the uterus. Final diagnosis: endometrial sarcoma, endometriosis, and invasive sarcoma into the myometrium. Alive and well 1968.

15. No. FED52693-1-609. 1965. 46-year-old Caucasian woman, gravida 2, para 2. Abdominal hysterectomy and BSO. Pathology report revealed unsuspected low-grade leiomyosarcoma and small myomata. Alive and well 1968.

16. No. 28105-65. 1965. 15-year-old Japanese girl. One-month history of bloody vaginal discharge and spotting. Polypoid mass protruding from the cervix. Biopsies of this mass at the time of D & C revealed sarcoma of the uterus. Pathologic diagnosis: sarcoma, probably leiomyosarcoma. Subsequently treated with total abdominal hysterectomy. Pathology report of the hysterectomy revealed no residual sarcoma. Doing well 1968.

REVIEW OF LITERATURE

Compilation of 16 series of cases reported in the literature^{5-12, 14-18, 20-22} in the last ten years revealed that sarcoma of the uterus accounted for 0.06% of all gynecologic malignancies and 2.8% of all uterine malignancies. The ratio of sarcoma of the uterus to adenocarcinoma of the uterus was 1:43. The incidence of sarcoma arising in myomata was 0.48% of all surgical cases of myomata uteri. The age range at which these tumors occurred was 27-80 years. The mean age was 50 years. The average five-year survival rate after treatment was 30%. The consensus of opinion was that these tumors are best treated by total abdominal hysterectomy and bilateral salpingo-oophorectomy. Sarcoma of the uterus usually spreads by blood-borne metastasis, especially to the lungs and liver, and eventually by local extension, with resultant large abdominal masses in many cases. Several authors^{10, 15, 18} point out that the ovaries can be conserved in young patients as the incidence of metastasis to the ovaries is small.

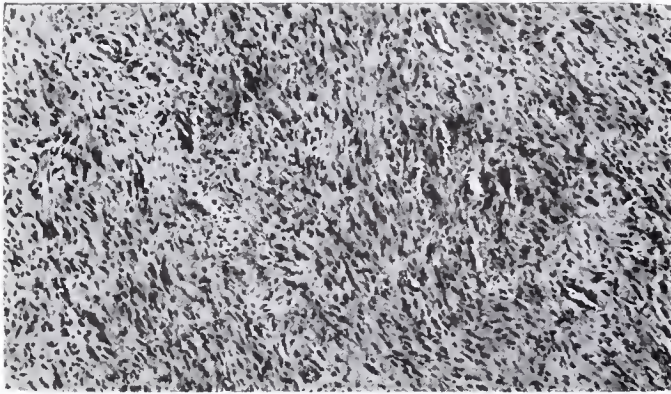


FIG. V.—A. No. 1G12331. Section from myomectomy, 1961. x100.

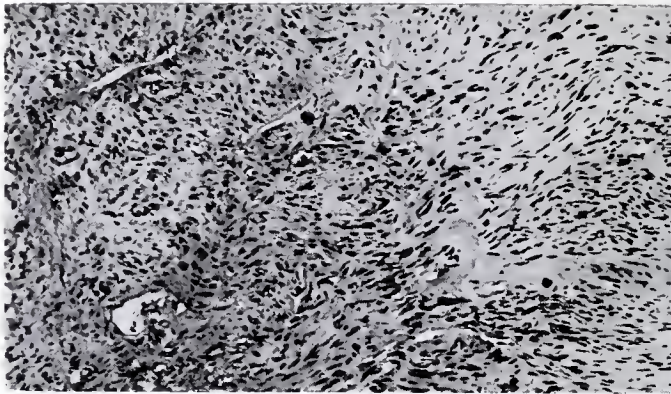


FIG. VII.—A. No. 1G12331. Section of metastatic tumor at autopsy, 1965. x100.

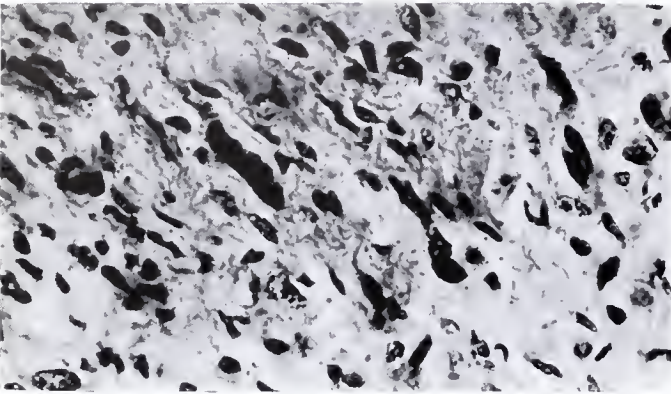


FIG. V.—B. No. 1G12331. Section from myomectomy, 1961. x930.

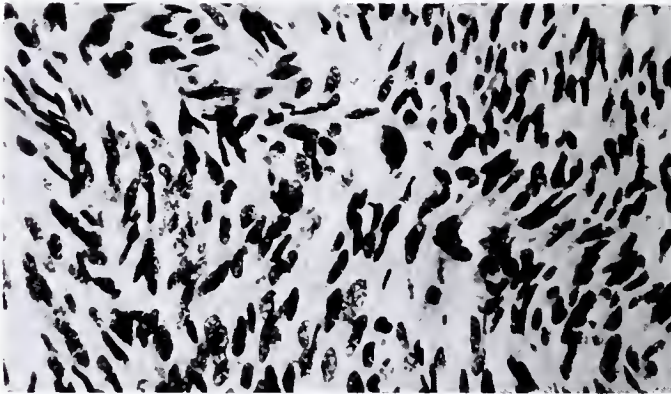


FIG. VII.—B. No. 1G12331. Section of metastatic tumor at autopsy, 1965. x930.

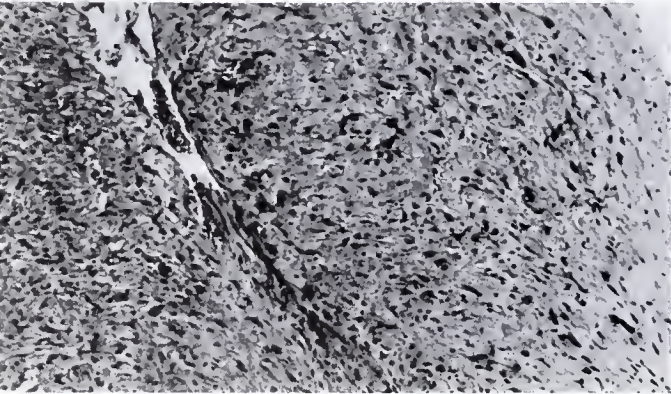


FIG. VI.—A. No. 1G12331. Biopsy of pelvic mass, 1964. x100.

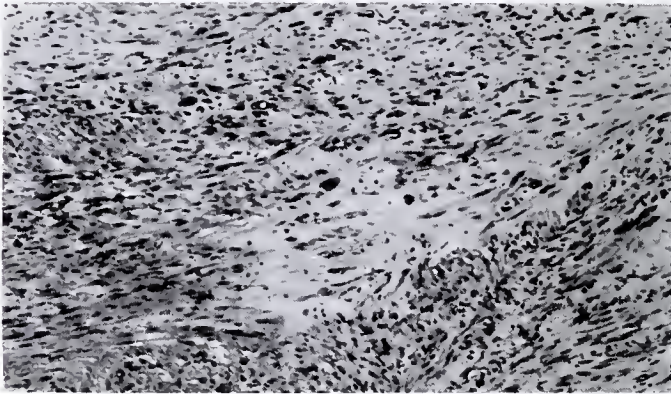


FIG. VIII.—A. No. 62-4072. Section from uterus at hysterectomy, x100.

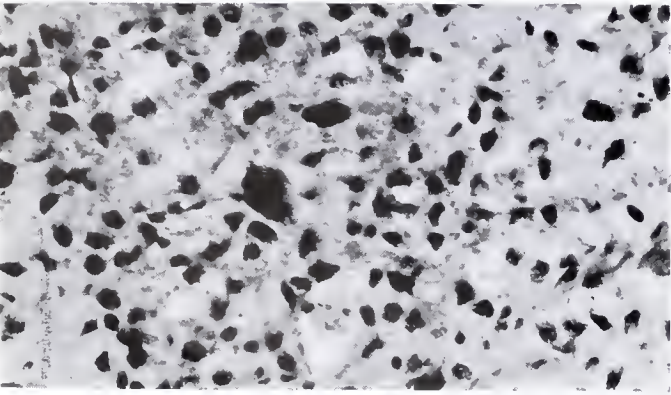


FIG. VI.—B. No. 1G12331. Biopsy of pelvic mass, 1964. x930.

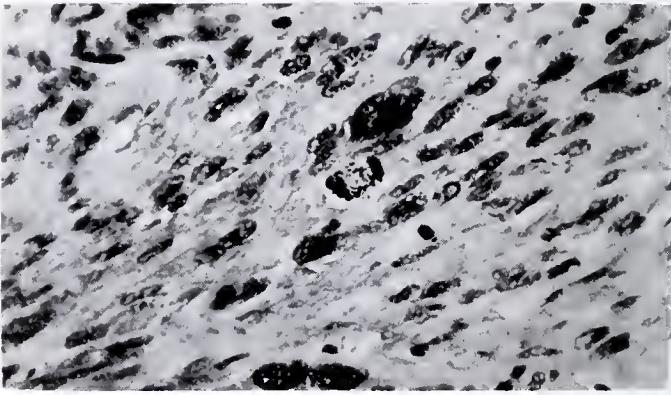


FIG. VIII.—B. No. 62-4072. Section from uterus at hysterectomy, x930.

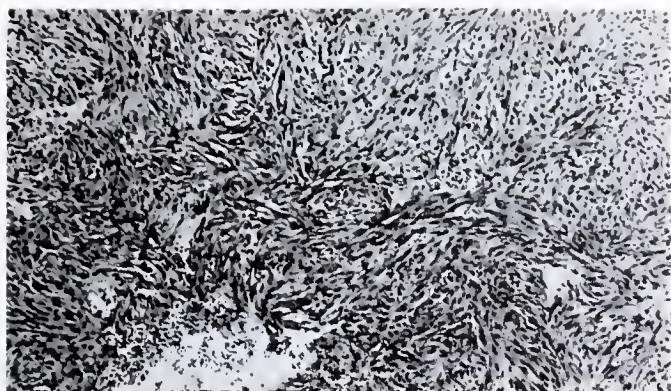


FIG. IX.—A. No. 65-5045. Tissue removed at D&C. $\times 100$.

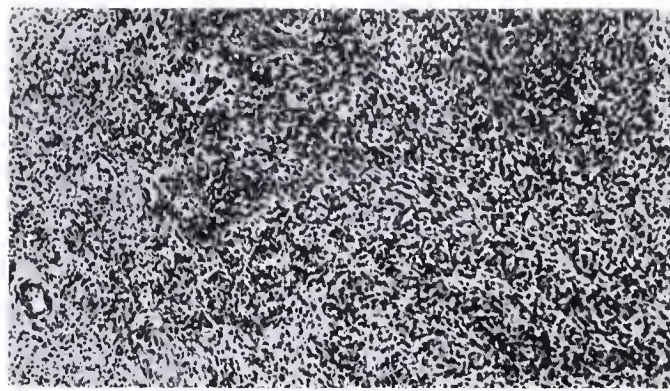


FIG. XI.—A. No. 13965-5. Section from material removed at D&C. $\times 100$.

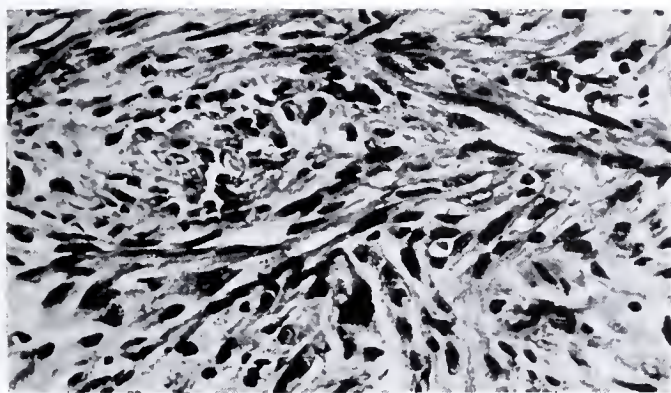


FIG. IX.—B. No. 65-5045. Tissue removed at D&C. $\times 930$.

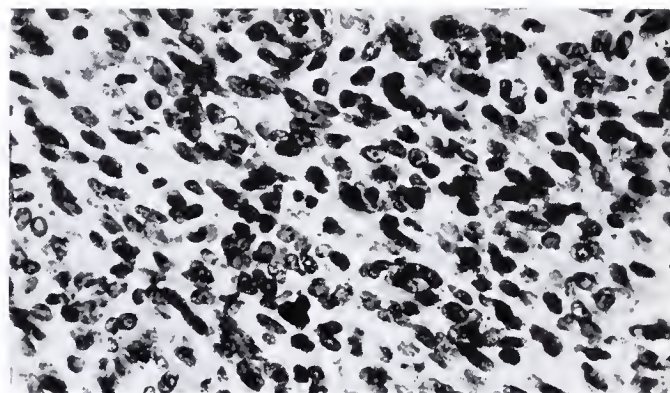


FIG. XI.—B. No. 13965-5. Section from material removed at D&C. $\times 930$.

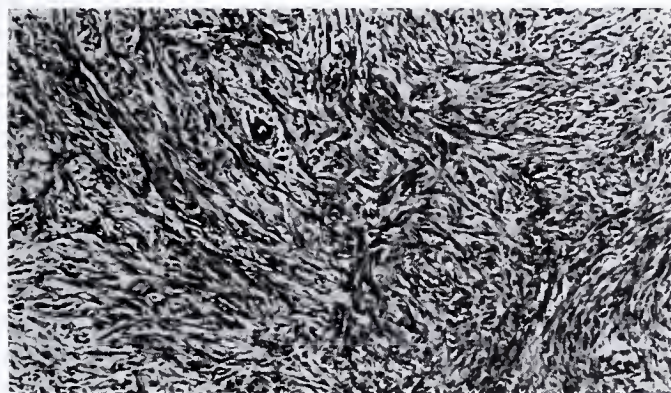


FIG. X.—A. No. 65-5045. Section from conization of cervix. $\times 100$.

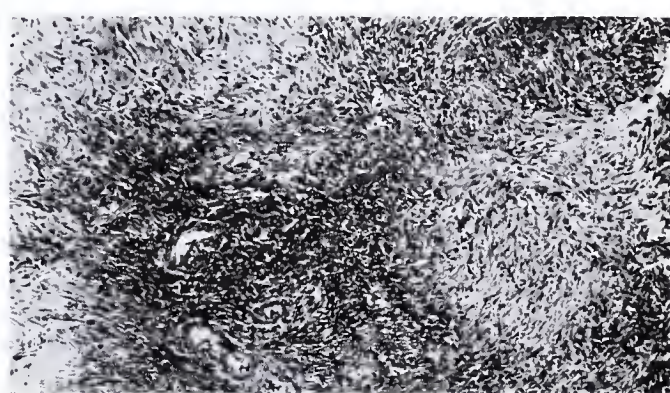


FIG. XII.—A. No. 13965-5. Section from uterus at hysterectomy. $\times 100$.

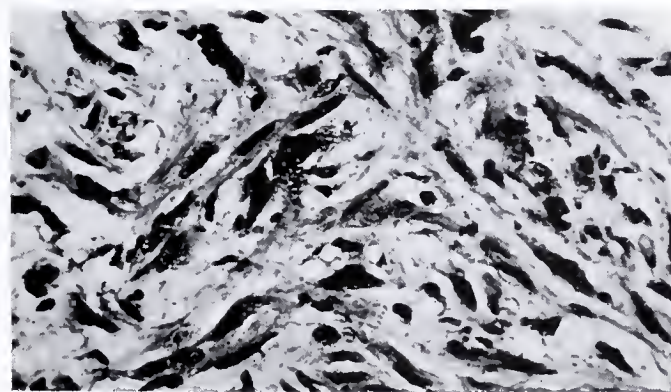


FIG. X.—B. No. 65-5045. Section from conization of cervix. $\times 930$.

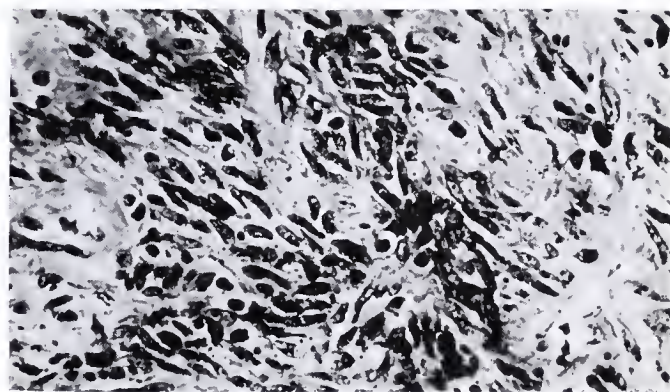


FIG. XII.—B. No. 13965-5. Section from uterus at hysterectomy. $\times 930$.



FIG. XIII.—A. No. 28105-65. Biopsy of cervical mass at D&C. $\times 100$.

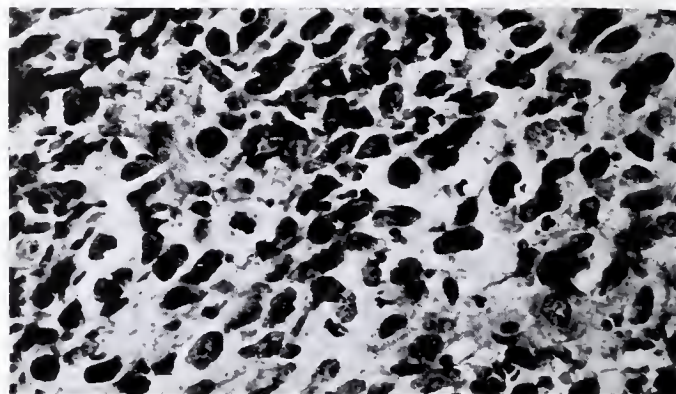


FIG. XIII.—B. No. 28105-65. Biopsy of cervical mass at D&C. $\times 200$.

If, however, the patient is over 40, almost all authors agree that bilateral salpingo-oophorectomy is indicated, along with total abdominal hysterectomy.

Aaro¹⁵ reported a series of cases in which five young patients were treated by hysterectomy only. In all cases, he found that prognosis was inversely correlated to direct extension of the tumor and that mitotic activity was a less reliable prognostic index.

Aaro¹⁸ reviewed 177 cases of sarcoma of the uterus at the Mayo Clinic. Of these, 105 were of leiomyosarcoma; 69, endometrial sarcoma (17 fibromyxosarcoma, 26 carcinosarcoma, 26 mesodermal mixed tumors); and 3, lymphosarcoma. None of these cases occurred before puberty. Parity was of no significance. The youngest case was of endometrial sarcoma (mixed), one case of which has been reported in a 13-month-old infant. Six and one-half per cent of the leiomyosarcomas and 26% of the endometrial sarcomas had a history of prior radium treatment for benign disease. Very little difference was found in prognosis among the various types of endometrial sarcoma. Aaro emphasized that the ovaries could be conserved in young patients desiring further children, but advocated hysterectomy and bilateral salpingo-oophorectomy as primary treatment. Palliative resection gave only symptomatic improvement and no increase in survival. Radiation therapy was of no value in leiomyosarcoma, but occasionally was helpful in endometrial sarcoma. It was his opinion that grading of the leiomyosarcoma was helpful and correlated with prognosis. The gross extent of the tumor was the best guide to prognosis. The outcome was hopeless for all tumors which had spread beyond the uterus.

Ariel²⁰ confirmed that radiation was of little value, and found that chemotherapy had no effect. He advocated treatment by hysterectomy and bilateral salpingo-oophorectomy. In this review of 11 authors and 174 cases, the mean five-year survival rate with leiomyosarcoma was 23%. In a survey of 18 authors, including 469 cases,

23% was also the mean five-year survival rate in all cases of sarcoma of the uterus.

Ariel²³ reported a case of pulmonary metastasis from a uterine leiomyoma treated by local resection. He suggested calling this lesion "leiomyosarcoma."

Barber²⁴ emphasized the surgical approach to endometrial sarcoma. This was illustrated by a case first treated in 1953 by hysterectomy for sarcoma of the uterus which was thought to be a leiomyosarcoma. In 1955, the patient had an anterior pelvic exenteration for recurrence of this tumor and, in 1964, an excision of a pulmonary metastasis which was thought to be the same tumor.

Boutselis¹¹ reported 36 cases over a 20-year period. Eighty-three per cent presented with abnormal bleeding, and these were mostly postmenopausal. Abdominal pain occurred in 44%. Only 14% were diagnosed correctly preoperatively. He noted that survival decreased with increasing uterine size. There was no relation with parity. Of the 26 D & C's in his series, 16 were positive—an accuracy of 57%, which is higher than in other series. There was a 70% accuracy of preoperative diagnosis by D & C with endometrial or mixed mesodermal sarcomas of the uterus. Menopause was critical as to five-year survival, with a survival rate of 57% in premenopausal women and 10% in postmenopausal women. Radical surgery and lymph node dissection were recommended only for sarcoma botryoides and carcinosarcoma. Radiation therapy was also indicated for sarcoma botryoides, but it had no effect upon leiomyosarcoma. Of the patients with sarcoma of the uterus, 33% were nulliparous.

Bruns²⁵ reported 19 cases in which the Pap smear was positive in 37%. Four of the 7 cases with leiomyosarcoma arose in myomata.

Chang²⁶ reviewed a series of 42 cases. Of 49 cases of sarcoma in myomata, only 11 were clinically malignant. He advised treatment by abdominal hysterectomy and bilateral salpingo-oophorectomy.

Corscaden²⁷ emphasized the low incidence of clinical sarcoma, which in his opinion did not justify hysterectomy for myomata. In his series, lethal leiomyosarcomatous change in myomata was 0.13% or 1 in 800—a much lower incidence than in other series. D & C was of little diagnostic value: of the 15 D & C's, 11 were negative; and of the four that were positive, three were misdiagnosed as endometrial carcinoma, and only one was diagnosed properly as sarcoma. He reported a case in which x-ray therapy controlled an abdominal mass for seven years and a pulmonary metastasis for five years, but no "cures" resulted from radiation treatment. In his 57 cases of sarcoma of the uterus, 32 were leiomyosarcoma, 23 of which originated in a myoma. Three of the 22 patients showed only atypical changes, and all of these were alive 2-20 years following surgery. Nineteen patients showed invasion, and all but one of these died.

Crawford²⁸ noted that all cases of endometrial sarcoma in his series were diagnosed by D & C when this was carried out. In leiomyosarcoma, only 37% were diagnosed by D & C. All of the endometrial sarcomas in this study were fatal. All patients with sarcoma extending beyond the uterus subsequently died.

Herman⁸ found that the size of the uterus per se was not of prognostic value. He noted a 0.3% incidence of sarcomatous change in myomata.

Jensen²⁹ reviewed 15 cases of endometroid sarcoma (stromal endometriosis). These often had a polypoid mass at the cervix; other cases had tumor in blood vessels with worm-like projections. Ten of the 12 cases with adequate material for evaluation had polypoid projections of tumor in the submucosal areas. Six patients had metastatic disease. Treatment was by hysterectomy, with a four-year survival rate of 75%. One case was recurrent seven years postoperatively. In patients whose ovaries were preserved, one case in four recurred. One case recurred 18 years after treatment. There was at least a 25% mortality rate from metastatic disease.

Johnson³⁰ calculated a rate of sarcomatous change in leiomyomata of 0.26%. Sixty-one per cent of his patients were more than two years postmenopausal. Of his leiomyosarcomas, 39% arose in myomata. Treatment of these was by hysterectomy and bilateral salpingo-oophorectomy. There was a four-year survival rate of 28% with leiomyosarcoma, and a five-year survival rate of 17% for all types of uterine sarcoma. Parity and race were of no significance in his series, and radiation therapy was of no benefit. Thirty per cent of the cases were diagnosed by D & C or biopsy prior to definitive treatment. He advised radical hysterectomy and pelvic lymphadenectomy, but this is not in general agreement with most authors.

Konis³¹ had a case of metastasizing leiomyoma of the uterus, occurring in a 36-year-old patient, with metastasis to the lungs. He cited references to two other cases with metastasizing leiomyomata, of which one was pulmonary and two were direct to the heart.

Koss³² advised aggressive surgical treatment of endometrial stromal sarcoma, even though most cases have a protracted course and some have prolonged survival in spite of recurrence of the tumor. He cited good palliative results from radiation therapy for residual or recurrent tumors. These malignant tumors and the other uterine sarcomas must be differentiated from pathologically confusing benign lesions such as uterine stromal endometriosis (stromatosis)³³ and intravenous leiomyomatosis of the uterus.³⁴

Lanstadt¹² reviewed the incidence of sarcoma arising in myomectomy specimens. Of 690 cases, he found sarcoma in five, or an incidence of 0.07%. Treatment of choice was then by total hysterectomy and bilateral salpingo-oophorectomy. However, he noted the prognosis was excellent, even without further surgery, if the tumor was well confined within the capsule of the myoma.

Montague¹⁴ emphasized the importance of age: of those patients under 40 years of age in his series, only one in ten died; of those older than 50, only one in 11 survived. When the tumor extended beyond the uterus, there were no five-year survivals. When the tumor was confined within the uterus, only four patients out of 24 died. Radiation therapy had no effect. In his series, pleomorphism was not an accurate criterion for prognosis, but the number of mitoses was correlated with outcome. When there was vascular involvement, the prognosis was extremely poor.

Murdoch³⁵ reported a case of spontaneous rupture of the uterus due to invasive sarcoma.

The *New England Journal of Medicine*³⁶ published a case of metastatic leiomyosarcoma of the uterus with calcification of the abdominal mass, in an 82-year-old woman. This was an exceptional case, in view of the patient's age.

Norris³⁷ reviewed 17 cases of sarcoma, in terms of postradiation therapy. He noted that 12% of the AFIP cases of sarcoma had had previous irradiation. None of these cases were of leiomyosarcoma, but were mostly of mixed mesodermal or carcinosarcomas.

Radman⁹ agreed with Corscaden that the incidence of sarcomatous change in myomata (0.3% in his series) was not an adequate indication for removing otherwise asymptomatic myomata of the uterus. He quoted Webb³⁸ as stating that 52% of sarcomas arise in myomata. He also pointed to Bosse's series³⁹ in which follow-up of patients with diagnosis of sarcoma in myoma revealed only

27% to be clinically malignant, whereas sarcoma of the uterus not in myomas proved to be clinically malignant in 55%. He noted that preoperative diagnosis is very unusual, if not impossible. Spread of the tumors was by direct extension and blood-borne and lymphatic metastasis. Radman also cited a reference to Davis,⁴⁰ concerning occurrence of a pulmonary metastatic lesion after removal of "benign" myomata by hysterectomy.

Schiffer²¹ reviewed 49 cases of diagnosed sarcoma of the uterus and then applied rigid pathologic criteria to the histopathology and found that only 29 were true sarcoma. Twenty cases were found to involve other tumors, of which 16 were histologically benign. Of those cases that fulfilled his criteria on histological section, there was a 78% corrected mortality rate. He pointed out that diagnosis of sarcoma of the uterus is most often made in the laboratory by the pathologist, and that there are no typical symptoms to differentiate this malignancy from other gynecological entities.

Spiro⁷ classified 62 cases of uterine myosarcoma by dividing them into four grades on the basis of nuclear abnormalities as opposed to mitotic counts. In those with primary surgical therapy, he found a five-year survival rate of 46%. In his Grade I group, with no adherence to other structures at the time of treatment, the survival rate approached 100%, whereas in his Grade II lesions it was less than 20%.

Spiro⁴¹ also reviewed the cases of so-called metastasizing leiomyomata. He found six cases in the literature, and advised radical surgery even if metastatic disease was present, owing to the prolonged course of the disease. He said that good palliation could be achieved by a vigorous surgical approach.

Stearns⁴² advocated primary preoperative radiation therapy, followed by total abdominal hysterectomy and bilateral salpingo-oophorectomy. Of his 57 cases, five were of "primary or diffuse" type, and 49 were "secondary or arising in leiomyomata." Of 37 cases with multiple myomata, eight had multiple sarcomas.

Swinton²² advocated that myomata be checked by the pathologist at the time of operation. His five-year survival rate of sarcoma of the uterus was 20.5%. He advised total abdominal hysterectomy and bilateral salpingo-oophorectomy. In his series, the incidence of sarcomatous change in myomata was 0.85%.

Walsh⁴³ found uterine sarcoma to be the diagnosis in 0.2% of gynecologic operations. This represented 4.0% of uterine malignancies and 0.82% of myomata uteri. All his cases had clinically obvious enlargement of the uterus. Very few were anemic; most had vaginal bleeding, and many had abdominal pain. Only one of his 11 patients survived for five years. He advised vigorous surgical

treatment—total abdominal hysterectomy and bilateral salpingo-oophorectomy with removal of all suspicious enlarging uterine masses.

Webb³⁸ agreed both with the use of an aggressive surgical approach and with the view that the only hope for cure of early sarcomas (which are the only cases cured by surgery) is by removal of all myomata of any significant size.

White¹⁷ noted that the Pap smear was positive before operation in 50% of his cases. Of 540,000 smears on 110,000 patients, the diagnosis of sarcoma of the uterus was made or suggested in 29 patients. Of these, 11 were Class II, 4 were Class III, 7 were Class IV, and 7 were Class V. Of the 18 positive (Classes III through V) smears, the cytologist suggested sarcoma as the specific diagnosis in only five. In his series, the preoperative diagnosis of sarcoma was entertained in 43% of cases. Several patients had a D & C with a pathologic diagnosis of sarcoma, but subsequent hysterectomy revealed no residual tumor. He found a positive prognostic correlation with the duration of symptoms, in that all patients with symptoms for more than nine months died of their disease. He found no correlation with parity or nulliparity. Seventy-six per cent of his cases had abnormal uterine bleeding. None of his cases of leiomyosarcoma of the uterus were diagnosed histologically prior to definitive operation, even with preoperative D & C. Only one case of endometrial sarcoma had a negative D & C. In the cases of endometrial sarcoma, seven of the eight had a positive Pap smear. Of six cases of leiomyosarcoma of the uterus, only three had positive Pap smears. He cited Masson's⁴⁴ reference to the highest incidence of sarcomatous changes in myomata as 10%, and Chang's²⁴ figure of the lowest as 0.21%. His five-year survival rate was 26%. Chemotherapy was used in 15 cases, with regression in only three cases and possible "control" in one case.

SUMMARY

Both clinically and pathologically, sarcomas of the uterus are unusual and fascinating tumors. Every effort should be made to establish a preoperative diagnosis by careful history, complete physical examination (especially pelvic and rectal examination), Pap smear of the cervix and vaginal pool, D & C, and radiological or other diagnostic measures when necessary. The preoperative diagnosis is difficult. Primary treatment is total abdominal hysterectomy and bilateral salpingo-oophorectomy. The ovaries can be preserved in selected young women. A definite pathologic diagnosis is necessary in order to establish prognosis, as well as consideration of radiation therapy. These patients should be followed indefinitely with early

and aggressive treatment of recurrent tumor. When the sarcoma is entirely confined to the uterus, and particularly when the sarcoma arises in a uterine myoma and is confined to the myoma, the prognosis with proper surgical treatment is good. Unfortunately, in most other cases, especially when the diagnosis has been made late in the course of the disease, the prognosis is extremely grave.

ACKNOWLEDGMENT

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The President's Page

We live in a period of rapidly increasing demand for health services. Our profession is being criticized as never before, because some of the public feel they are not getting enough health services, and everyone is concerned at the cost. Health insurance and government programs have made many patients oblivious to costs they do not individually expect to pay. No individual doctor can solve these problems, but collectively we should be able to suggest some solutions, or others will tell us how to practice.

Someone must speak for us in our dealings with groups of our patients and third party payers, the government, employers, insurance companies, and health and welfare funds. We need the abilities and energies of all members of our profession working together to solve our problems.

I am encouraged by the willingness of physicians to accept membership on our 52 committees, which do the work of your Association. Your officers and committees are seeking ways and means of streamlining the organization of the Hawaii Medical Association to more efficiently handle the work load and to save money. If you want to serve on a committee and were not named to it, let me know and we will try to place you.

I would like to urge all non-member physicians to become members of their county and state associations so that we can benefit by your ideas and represent all members of our profession. If you don't like what the Association is doing, get active in it, and by your vote make your voice heard!

I believe as individuals, no one can legitimately criticize ethical professionals who work 50 to 70 hours per week in the service of mankind. Individually I believe we take excellent care of our patients, but also I believe as a profession we must assume more collective responsibility in providing medical services for groups and individuals not receiving the benefits of modern medicine.

This does not mean we should all practice alike. Some physicians and patients will only be happy in a private solo practice set-up. Certain areas can not support a multispecialty group. Other areas will need government support if any medical services are to be provided.

This will all cost money, and we must keep reminding payers that when the quantity and the quality of services demanded are increased, it is sure to cost more money. We need your ideas and talents to tell our side of the story. We also need to work with, not antagonize, the public and all persons concerned with the provision of and payment for health services. This means labor, business, insurance carriers, hospitals, government at all levels, and the individual citizen. The job is staggering but after all, it is part of our responsibility.

John J. Lowrey

Sudden Death from Sniffing

Sudden death after sniffing volatile hydrocarbons in paint, glue, or various aerosol products has often been blamed on suffocation by a plastic bag used to confine the fumes for more efficient sniffing.

A survey by Bass¹ disclosed 110 cases of sudden death after sniffing, *not* due to bag suffocation, occurring in the United States since 1960. Two of the 110 cases occurred on Oahu. Six of these are reported as eyewitness accounts, and though they were caused by a variety of aerosols (and one by airplane glue) all were associated with violent muscular activity immediately after sniffing, followed by sudden collapse and death. Eighteen cases were associated with some activity just after or before sniffing; strangely, these do not include the six eyewitness cases detailed

earlier. The hypercapnia resulting from rebreathing from a bag, it is suggested, potentiates the pharmacologic effect of the hydrocarbons, and physical activity aggravates this.

Such cases are undoubtedly incompletely reported, since friends and family are both inclined to conceal the facts if possible.

The conclusions one might draw should surely include these:

- Chronic toxicity is by no means the most important hazard incident to sniffing of volatile hydrocarbon vapors.
- Use of a plastic bag to enhance the effect is highly dangerous.
- Sniffers too stupid or compulsive to kick the practice should not engage in strenuous activity before or after sniffing.
- Sniffing can kill you!

¹ Bass M: Sudden sniffing death. JAMA 212:2075, 1970.

AMA Woos Specialty Societies

The American Medical Association established on Jan. 22 the Department of Specialty Society Services, directed by Theodore R. Chilcoat, Jr.

Commenting on the new appointments, Dr. Howard said, "The establishment of this special department is an important step in strengthening AMA's relationship with the specialty societies, and it is the culmination of a long range program undertaken to upgrade the services of the AMA to the specialty societies.

The Department's responsibilities, under the direction of Mr. Chilcoat and a staff aide, are to assist Dr. Richard Wilbur, secretary of the four-year-old AMA Interspecialty Committee,

further liaison with specialty groups, and advance the development of the new specialty section councils of the House of Delegates.

Mr. Chilcoat, whose new department is a component of the AMA Office of the Executive Vice President, was assistant executive director of the Medical and Chirurgical Faculty of Maryland until his appointment to the AMA staff. His first AMA position was as a field representative for the states of Massachusetts, Rhode Island, Connecticut, New Jersey and Delaware. He later provided AMA liaison with national specialty societies and served as assistant director of the AMA Department of Governmental Relations. ■



Hawaii Academy of General Practice

. . . . GO GET A DOCTOR'S SLIP!

For wages or salaries to continue without interruption during illness or disability is one of the treasured benefits of permanent full employment.

Not only are improvements in sick benefits a part of every labor union's goal, but they are also in management's best interest in getting and keeping good employees. These interests are manifested in a great variety of ways: Part or full purchase of a health and accident policy by management; direct continuation of wages for a generous period of time; medical retirement contracts; and as a matter of law, Workmen's Compensation and recently, in Hawaii, the compulsory purchase of TDI—Temporary Disability Insurance—shared by employer and employee. MEDICARE and related programs come under similar categories. As is the case for Federal employees, benefits sometimes are cumulative.

The principle of "sick leave" rests on solid moral and humanitarian grounds. Sickness or accidental injury is usually an unfortunate happenstance, neither sought nor expected. Either can be a crushing blow to the welfare of the family of a breadwinner. The devices of our society involved in productive living include either voluntary prepaid plans or legally compulsory provisions to cushion such a blow. All of us pay, that the unlucky may survive: the basis of insurance.

This is good. This is necessary. But, mixed in with it is lots of what's bad. And the doctor is the "fall guy."

If a worker has a minor illness such as a cold, a three-day migraine, dysmenorrhea, or some such, common sense dictates that the victim primarily treats himself. This is because physicians, in general, are in short supply, overworked and hard put to it to care for the seriously ill, and their modern services cost money. Why should they have to treat a minor ailment that either runs its benign course in a body designed to combat most diseases by itself, or an ailment that is amenable to cure by some of the out-pourings of advertisements by the drug industries and available across the counter?

"Have to?", you ask. Yes, most definitely the doctor HAS to see this patient—in order that the

hapless worker can return to his or her job at all! Is this not patently ridiculous?

Here's another example: Just the other day an instance occurred that is all too common an experience of nearly every practicing physician. Jane Doe called her employer to say she wasn't feeling well and intended to stay home and "rest the body" that one day. The foreman suggested: "Why not stay home two more days, get a doctor's slip, and that way you can claim sick leave and not lose a day's pay." Jane did just that, being quite well when she went in to take the doctor's five to fifteen minutes of precious time. An obvious abuse, you'll agree—but an abuse by whom? By the employee? By the employer's foreman? Who bears the cost? Obviously the insurance carrier, per primum, but every single one of us citizens in the ultimate. These costs are multiple: Nonproductive time lost and compensated, physician's charges, most likely drugs purchased, and, later on, higher insurance premiums for millions of us.

The physician is forced into dishonesty (1) if he signs the medical excuse slip for an employee out of compassion, suspecting but not knowing for certain whether it was nothing more than a Monday hangover; (2) if he takes an honest patient's word for it, but has to charge him for an unnecessary office visit, and perhaps manufacture a spurious diagnosis on the insurance form. If the physician refuses, whether he is right or wrong, he will antagonize, and may lose, a patient. The physician who signs all requests in order to keep his patients or friends happy and because he resents the compulsory regulation, is cheating the employer and the insurance carrier, and *you*, too.

Of course, the answer is that some worker once ago perpetrated the original abuse of a good thing, calling down upon us all rules and regulations ad nauseam. For us medicos, however, the horror lies in the fact that the powers that be, the lawmakers, think absolutely nothing of our position and care not a whit about our scruples. Place the burden on the doc's shoulders; he doesn't have much else to do. And as for adding to the cost of medical care on the employee? Why doesn't doc sign the medical excuse slip for free? ■

J. I. FREDERICK REPPUN, M.D.

The Tussive Teenager

Many disciples of the Age of Aquarius seem prone to the development of persistent cough following apparently minor respiratory illnesses. The usual diagnostic studies are invariably unrewarding, chest x-rays, blood counts, and sputum cultures being completely normal. Bronchoscopy, however, often reveals redness and chronic irritation of the trachea and major bronchi. Usually the culprit is not some mysterious virus, but marihuana.

Afficionados of the art of "pot" smoking know that the best "high" comes from smoking the final half inch or so of the cigarette, termed the "roach." Indeed, numerous ingenious mechanical devices called "roach holders" are utilized to safeguard against burning one's fingers during this process. This portion of the smoke is also intensely irritating to the tracheobronchial tree, producing the puzzling and persistent cough seen in many teenagers today.

Fatal Familial Fever

The unparalleled safety of general anesthesia is now taken for granted by both physician and patient. Occasionally, however, unexpected deaths, apparently precipitated by administration of a general anesthetic, occur in certain individuals and families. Death is preceded by generalized muscular rigidity and high fever, presumably due to some inherited metabolic dysfunction which becomes activated by the anesthetic agent.

The problem is to detect these patients prior to operation so that general anesthesia can be avoided. A family history of anesthetic difficulty would be of prime importance, but unfortunately, it is not always forthcoming. Recent studies by Denborough (*Lancet*, May 30, 1970) have shown

that members of these families have high serum CPK, SGOT, and LDH levels.

CPK estimations are not performed routinely on preoperative patients. However, many do get an SMA-12 profile, which measures the SGOT. It would seem feasible to insist that all patients who are to undergo general anesthesia have a routine SMA-12 profile. If an unsuspected SGOT elevation is found, a CPK should be performed. If this is also elevated without obvious cause, and particularly if there is a family history of unexpected anesthetic difficulties, then general anesthesia must be avoided if a tragedy is to be prevented. Fortunately, these patients do well with local or regional techniques, such as spinal or epidural anesthesia.

Functioning Fetal Tumors

Certain tumors, particularly carcinoids, pheochromocytomas, and some bronchogenic carcinomas, elaborate hormone-like substances which when released into the circulation may produce systemic effects, such as flushing, palpitation, hypertension, and hypercalcemia. Indeed, the astute clinician often confidently diagnoses the presence of such functioning tumors by observation of these characteristic systemic effects.

To take this concept one step further, would it be possible for a functioning fetal tumor to release active substances into the maternal circulation and produce clinical effects on the mother?

A common childhood tumor, the neuroblastoma, may develop in utero and produce catecholamines. That these catecholamines may reach the maternal circulation is suggested by Voute. (*J. Clinical Pediat.* 9:206, 1970) who described six cases in which fetal neuroblastomas apparently induced sweating, hypertension, headache, and palpitations in the mothers.

W. P. JONES, M.D. ■



University of Hawaii.....

The fourth class has been admitted to the University of Hawaii School of Medicine. Forty-one regular and 10 special students will begin studies in September. The 10 special students have been selected from among applicants with different cultural backgrounds, who will be given the opportunity of intensified instruction. Two of the special students are from Hong Kong, one from Guam, one from Thailand, one from Guyana, South America, and five from Hawaii. Their opportunity to attend medical school has been made possible by a \$1,700,000 grant from the HEW which for five years also provides for extra classroom space. Of the 41 regular students, 35 are residents of Hawaii, two are from Hong Kong, two from Canada, and two from the Mainland. Of the entire class of 51 students, three are women; and 24 took their undergraduate work at the University of Hawaii.

On June 3, 1970, 48 members of the Medical School Faculty and 11 students held the annual retreat at George Mills' home at Punaluu. The morning was devoted to discussion about the curriculum, year-1, year-2, and proposed interdepartmental undergraduate courses for all students interested in the health sciences. Also discussed were current and future student selection methods. After lunch the subject was community relations, within and outside the University, legislature, press, medical community, hospital and consumers of health services and health careers. We were particularly pleased that **John Lowrey, M.D.** and **Theodore Tomita, M.D.** spent the entire day with us.

New appointments to the School of Medicine Faculty are: **Charles S. Judd, Jr., M.D.**, Professor of Medical History and Surgery, who will have his office at the University of Hawaii-Leahi Hospital; **Ruth G. Kleinfeld, M.D.**, Associate Professor of Anatomy, previously with the Department of Pharmacology, State University of New York, Syracuse; **N. V. Bhagavan, Ph.D.**, Associate Professor of Biochemistry and Medical Technology; and **Arnold W. Siemsen, M.D.**, Associate Professor of Medicine (part-time), Director of Nephrology Clinic, St. Francis Hospital.

Retiring in September, 1970, is **Theodore Winnick, Ph.D.**, founder and first Chairman of the Department of Biochemistry. Professor Winnick has served the University since 1961, and has had an outstanding career as a scientist teacher, and administrator.

In the Department of Psychiatry, **John McDermott, Jr., M.D.** joined a group of child psychopyschiatrists working on a national report on treatment planning for children, in Philadelphia April 7, 1970. Dr. McDermott also traveled to Pago Pago on April 26 to survey the need for mental health facilities in American Samoa.

Physiologists **Suk Ki Hong, M.D.** and **Martin D. Rayner, Ph.D.** delivered papers at the annual experimental biology meeting at Atlantic City April 11, and **T. O. Moore, Ph.D.** spoke at the 41st annual meeting of The Aerospace Medical Association at St. Louis April 27, 1970.

ROBERT W. NOYES, M.D. ■

The patient is a 43-year-old male musician with a chief complaint of severe chest and epigastric pain. This had a slow onset approximately two days before admission, with gradually increasing pain associated with moderate dyspnea, aggravation by change in position, inability to lie down, and worsening by deep respiration. EKG showed a slight elevation of the ST segment. SGOT was 18 and SGPT-22. Temperature was 103°. Physical examination was essentially negative, except for tachycardia of 100 per minute with heart tones

slightly muffled but with no murmur and no pericardial rub. The chest x-ray at that time was normal and the patient was thought to have a viral infection with pleurodynia. He was discharged in approximately six days feeling considerably improved. The patient was readmitted about approximately three days later with persistent fever of 102° but with the chest pain, dyspnea and other symptoms no longer present. He was readmitted because of the appearance of the first chest film, left below.



There had been a definite increase in the cardiac size and shape in comparison to previous chest examinations and there was now a typical EKG tracing of pericarditis. Approximately nine ounces of clear straw-colored fluid was removed and air was injected. A decubitus view, right above, verifies the pericardial effusion and the degree of same. The patient was treated with appropriate antibiotics and made a rapid and uneventful recovery. Final diagnosis was acute pericarditis with effusion, probably viral in origin.

Submitted by the
Radiological Society of Hawaii
THOMAS C. BROWN, M.D. ■

This is the eighty-fifth installment of In Memoriam—Doctors of Hawaii.

John J. Grace

John J. Grace, born in 1870 in Wellington, New Zealand, and a graduate of medical institutions in England, arrived in Honolulu from San Francisco aboard the "City of Peking" on December 30, 1898.



DR. GRACE

In January, 1899, he located in Hilo, Hawaii. In April of that year he was appointed acting port physician in the absence of Dr. Robert B. Williams, and, when Dr. Williams resigned in September, Dr.

Grace received a permanent appointment. On the outbreak of bubonic plague in Honolulu in December, 1899, Hilo physicians quickly organized to take preventive measures to ensure that it did not reach Hawaii. Dr. Grace headed the locally appointed Hilo Health Committee, and was later appointed by the Board of Health to act as their agent in the Hilo district. The vigilance of the committee, backed by the citizens, kept the plague to a single fatal case in Hilo.

Dr. Grace was on the staff of the Hilo Hospital and, subsequently, chief of staff. He was also one of the incorporators of the First Bank of Hilo, Ltd., when it was organized in March, 1901. In 1903 he was treasurer of the Volcano Stables and Transporting Co., Ltd., and also served as a director of the Kohala and Hilo Railway Co. On the social side, the doctor was president of the Hilo Cotillion Club from 1901 to 1902.

He was a member of the Hawaiian Medical Society; a founding member and medical officer of the Court of Mauna Kea, Ancient Order of Foresters, which was organized in August, 1899; and a 32d degree Mason.

Dr. Grace married Miss Eleanor Vere Greenfield, daughter of Dr. and Mrs. Charles B. Greenfield of Honokaa, Hawaii, on March 28, 1906, in Honokaa. They had a son, John, and two

daughters, Alicia (Comtesse Gerard De Brosces) and Cynthia (Mrs. Muir).

About 1900 Dr. Grace was appointed acting assistant surgeon for the U.S. Public Health and Marine Hospital Service in Hilo and served in that capacity until 1910. In November, 1910, he took a trip to New Zealand, returning to Hilo for the last time in August, 1911. For five months he took over the practice of Dr. Frederick Ritson of Hilo, and in February, 1912, he left the Islands.

Arriving in England with his wife and son, Dr. Grace practiced in Harley Street, London, and specialized in the use of electrotherapy. He continued in private practice throughout World War I, chiefly because of the loss of his hearing due to an attack of typhoid fever which he contracted while in the Islands.

In 1920 he was summoned to Jamaica to attend his ailing brother, Sheffield (Tim) Grace, who died before he was able to reach his bedside. In the course of settling his brother's affairs, Dr. Grace accepted the managing-directorship of the Kingston office of W. R. Grace and Co. of New York. Jamaica became his home for the next 25 years.

In 1925 Dr. Grace, two of his cousins, and another employee of the firm, Fred Kennedy, undertook to buy out the business. Operating under the name of Grace, Kennedy and Company, Ltd., it developed into a highly successful enterprise.

Dr. Grace established a home, Strawberry Hill, in Jamaica, which was the envy of his contemporaries, a show place of considerable note, and in later years a guest house for tourists.

Strawberry Hill lies at an elevation of about 2,700 feet and is relatively cool. There gardening became Dr. Grace's chief avocation.

When World War II ended and their children were widely separated, Dr. and Mrs. Grace moved to California where they could be closer to their grandchildren.

Dr. Grace died in San Rafael on February 11, 1956, and it seems fitting that a man who had led such a good life should meet his end peacefully, sitting in his own armchair by his own hearth. Mrs. Grace survived her husband for several years, and both are buried in the cemetery at San Rafael. ■



David J. G. Fergusson, M.D.

888 South King Street
Honolulu, Hawaii 96813

CARDIOLOGY

University of Capetown, South Africa
—1956

Internship—Grootteschuur Hospital &
King Edward VIII Hospital—
1957-1958

Residency—King Edward VIII
Hospital—1958-1962



Clare Sprague, M.D.

1319 Punahou Street
Honolulu, Hawaii 96814

PATHOLOGY

Stanford University—1955
Internship—San Francisco General
Hospital—1954-1955
Residency—The Queen's Medical
Center—1964-1968

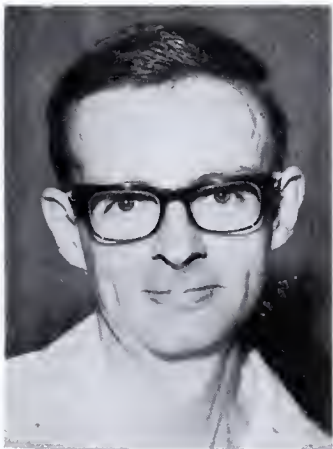


Sergio S. Lim, M.D.

1697 Ala Moana Blvd.
Honolulu, Hawaii 96815

UROLOGY

University of Santo Tomas—1960
Internship—St. Michael Hospital,
Milwaukee, Wisconsin—1961-1962
Residency—St. Luke's Hospital,
Milwaukee, Wisconsin—1962-1963
Mercy Hospital—1963-1965
Mt. Sinai Hospital—1965-1966



James H. Johnston, M.D.

45 Aulike Street
Kailua, Hawaii 96734

OPHTHALMOLOGY

University of Louisville—1959
Internship—The Queen's Hospital—
1959-1960
Residency—The Queen's Hospital—
1960-1961
Detroit Receiving Hospital—
1961-1964



Gunars Medins, M.D.

P. O. Box 1190
Kailua-Kona, Hawaii 96740

**GENERAL & THORACIC
SURGERY**

Philipps University, Marburg,
West Germany—1950
Internship—Lutheran Hospital,
Baltimore, Maryland—1951-1952
Residency—West Suburban Hospital,
Oak Park, Illinois—1954-1955
Mercy Hospital, Chicago, Illinois—
1955-1956
Municipal TB San., Chicago, Illinois
—1957-1958
Passavant Memorial Hospital,
Chicago, Illinois—1958-1960
VA Kennedy Hospital, Memphis,
Tennessee—1960-1961



Robert H. Moser, M.D.

99 South Market Street
Wailuku, Maui 96793

INTERNAL MEDICINE

Georgetown University—1948
Internship—District of Columbia
General Hospital—1948-1949
Residency—D.C. General Hospital—
1949-1950
Georgetown University Hospital—
1952-1953
Brooke General Hospital—1956-1957
Baylor University College of
Medicine—1958-1959
Salt Lake City Hospital—1959-1960

Those Turf Diggers

We all have our alibis, and **Tom Thorson**, our executive secretary, has a beaut. Tom blames a conspiracy of machines for his poor showing in the recent HMA Golf Tournament. As he tells it, on the night before at the scientific session, nary a single one of six cigarette vending machines would work. (We suspect **Walt Chang**, our long suffering anti-cigarette-vending-machine crusader, may have jimmied their works.) When a balking machine finally took his money, Tom, his adrenalin titre up, simply nudged the machine gently, spraining his kicking foot rather badly. On the course next day, his golf cart developed a flat on the 5th hole. A replacement cart simply conked out on another hole, and he had to limp the rest of the way. . . . Tom screws up his face wryly as he admits, "Machines and I just don't seem to get along. . . ."

We are happy to report that **Frank Fukunaga's** mysterious Chinese incantation, "Ah Shit . . . Ah Shit . . ." has now been replaced by an equally enigmatic "Ah Shoot . . . Ah Shoot . . ." But then others seem to have taken up the hue and the cry. . . . Recently we could hear **Ed Emura** fervently intoning the chant after dubbing his shot. . . . "Blue" **Nishigaya** was overheard consoling him with, "But Mr. Ah Shit has left town. . . ."

Ed Emura is a master at the fine art of golf heckling. . . . Recently when an opponent kept his cool, ignoring all his frantic jibes, he reached for his ace-in-the-hole: "If you can't bug them, that means their skulls are too thick. . . ." With this last dig, his erstwhile composed opponent dubbed his next shot and seemed to fall apart. . . .

Life in These Parts

Pathologist **Grant Stemmerman** recently developed a mysterious butterfly rash with an erythematous hue. His astute secretary diagnosed it as a mango rash at a glance. It later turned out that Grant had helped Jean make mango chutney, but our ivory tower diagnostician kept insisting that it was trichinosis from the half-cooked pork he recently had at his favorite Tin Tin Restaurant. . . . It was weeks before he finally conceded that his secretary was probably right. . . .

During a Queen's quarterly meeting, **Jim Marnie**, our volatile, redheaded Utilization Committee chairman, keenly aware of the medicolegal problems involved in moving some of the chronic patients out of acute beds, recommended that balking patients be reported to his subcommittee "so that we can figure out a charming way to extirpate them. . . ."

At the same meeting, Chief of Staff **K. Y. Lum** apologized, "Some of you may have been suspended for delinquent charts. . . . With this hard line, the number of delinquent charts has dropped from 1,400 to 1,100. . . ." (A true success story.)

During oncology-hematology-cancer-chemotherapy rounds at Kuakini, a 75-year-old man with acute myelogenous leukemia who had been readmitted in stupor after a recent CVA was being discussed. An intern asked enthusiastically what treatment was being accorded. **Tom Fujiwara** replied rather caustically: "Under the circumstances, the patient is being treated with gracious neglect. . . ."

Conference Humor

During a Children's Hospital luncheon conference, **Mohamed Rashad**, associate professor of genetics at our medical school here, expounded his favorite topic, "Dermatoglyphics in Pediatrics." He explained how those whorls, ulnar loops, radial loops, double loops and ridges in our fingerprint patterns had definite genetic connotations and were significant in congenital disorders.

After studying 700,000 fingerprints, he has found that the patterns differ for Japanese, Hawaiians, and Caucasians. **John Peyton** was curious, "What is the trend if a person is part Japanese and part Caucasian?" Mohamed replied, "The pattern is intermediate." **Mits Tottori** was intently studying his own prints when **Roy Kaye** whispered, "You're in trouble. . . ." Mits admitted, "Mine shows a definite Mongoloid pattern." **Don Char** chimed in, "Your pattern is probably Caucasian. . . ."

During a Kuakini surgical statistics conference, our intern from Japan, **Hirokazu Ichikawa**, was having some difficulty with his "I's" sounding like "r's." He described a 21-year-old machine operator who had his right leg pinned by a bulldozer and his popliteal artery severed. Even after surgical correction, "the right foot was *branched* and cold. . . ." (Exfoliating limbs?)

Visiting Physicians

New York University's **Joe Post**, a soft-spoken, genial, and wizened intellectual with the kindly demeanor of a family physician, was the visiting professor at the Med School. Joe spoke on "Tumor Cell Kinetics and Cancer Chemotherapy." Joe, we learned, divides his time equally between clinical medicine and research, and has studied extensively the generation times of tumor and normal cells with autoradiographic techniques. He has found from these studies that contrary to prevailing belief, normal cells (especially from bone marrow, lymph nodes, and the gut) actually have shorter generation times than tumor cells. This, in effect, means that in cancer chemotherapy we are destroying more normal cells than cancer cells. Earlier studies showed that tumor cells have shorter generation times, but Joe feels that this is true only of tumor cells which have been transplanted and not of tumor cells in the original host. His studies on hepatomas, breast tumors, and sarcomas show longer generation times and therefore antimetabolites are certainly contraindicated. The exceptions are Hodgkin's and lymphomas, where the antimetabolites appear to work better. Joe apologized, "The chemotherapists may not like this, but I'm simply aghast when we take a satchel full of poisons, in the case of solid tumors, esp. of the GI tract, and give it to our patients." He does point out that there are situations in which certain cells seem to sit on the sideline in G20 and G10 states (sort of hibernation), and told the story of his wife's grandmother, with cancer probably in the G20 state, who outlived two of her surgeons. . . .

Kenneth Moser, a curly-mopped, craggy-featured, sharply-dressed visiting professor from University Hospital of San Diego County, lectured to a capacity crowd for two weeks on pulmonary functions and acute and chronic pulmonary diseases. The following Moser gems were noted:

Re pulmonary embolism and infarction: probably 90%

of pulmonary emboli do not result in pulmonary infarction. The only consistent symptom of pulmonary infarction is dyspnea . . .

Re hazards of heparin therapy: after age 70, esp. in women, there is an increased incidence of bleeding which has no correlation with clotting time or partial thromboplastin time . . .

Re surgical prophylaxis of pulmonary embolism: neither superficial ligations of veins nor interruption of the inferior vena cava is effective . . .

Re respiratory insufficiency: there are two kinds: alveolar hypoventilation, where the pO_2 is lower, pCO_2 rises and pH drops, and hypoxemia alone, where pO_2 drops and pCO_2 is normal.

Re CNS changes in alveolar hypoventilation: some of the nicest people have tried to slug me when they had alveolar hypoventilation. Fortunately they do not remember anything . . .

Re pleural fluid: first thing is to look at it. We are so wrapped up in exotic fluid studies that we forget to look . . .

Re alpha-1 antitrypsin deficiency: less than 1% of the population is homozygous for this and 5% are heterozygous. With the interaction of smoking and even the heterozygous trait, there is a predictable high incidence of chronic obstructive lung disease at an earlier age . . .

"Horses' lungs most closely resemble human lungs. . . . The chronic bronchitic are 'blue bloaters and quitters' and the emphysematous 'pink puffers and fighters'. . . ."

UC's **Robert Bolt**, tall, leathery, short-cropped, and speaking with that certain twang we remembered from Michigan days, was visiting professor of medicine at Queen's. Bob covered malabsorption syndromes and when someone asked for a definition of an alcoholic, he promptly replied, "It's anyone who drinks more than you do. . . ."

Sobering Statistics

Intrepid researcher **Abe Kagan** gave an interim progress report on the findings of his Honolulu Heart Program which has been comparing Japanese men (born between 1900 and 1919) in Hawaii with their counterparts in Hiroshima. Abe pointed out that local Japanese men tend to have higher uric acid levels, higher blood sugar levels, more coronary heart disease, but fewer CVA's and less hypertension. Recently pathologist **Grant Stemmerman** returned bleary eyed from a two-week trip to Hiroshima, where he reviewed 6 slides each from 500 Japanese men's hearts (from routine autopsies) of this group and found that Japanese men in Hawaii have a six to seven times greater incidence of coronary heart disease. . . . (Quite sobering, eh?)

"To talk of diseases is a sort of Arabian Nights' entertainment" (Osler)

Colorado's **Gil Blount** was the visiting professor of medicine at Queen's in April. Gil, a tall, well-built, older athlete with frontal alopecia and furrowed brow (shaped like inverted T waves), exuberant, and hearty-voiced, came prepared with orderly slides and well organized lectures on the exotic and rare rather than the commonplace and usual. . . . Yet Gil held capacity crowds captive for 2 weeks while he covered pulmonary hypertension (i.e. the idiopathic, the high-altitude, and pulmonary hypertension per se), pulmonary circulation in congenital heart diseases, nonrheumatic mitral and aortic insufficiencies, EKG's and diagnosis of congenital heart diseases, familial cardiomyopathies, etc. Gil confesses, "Congenital heart disease is sort of like frosting on the study of cardiology." Off the lecture podium we were equally impressed with his tennis (which he plays

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LESTER T. KASHIWA, M.D. 1918-1970

"Time" is an elusive element, it never stands still; constantly in motion, it is forever moving forward. Thus, those of us in the medical field can fully appreciate "Time" in all of its many-faceted wonder. Lester Kashiwa, a beloved friend and colleague, truly understood "Time."

"Come, stand with me on the seashore, gaze out to sea—it's sunset, the rays of the sun are fading from deep orange to soft yellow; to misty pink and orchid. Is this what heaven is like? Could there be greater beauty than this in the great beyond?"

The heavens weep, the raindrops fall in a veil spun as fine as spider silk. I hear the whispering of the gentle tradewinds, they are saying, 'be happy, my friend.'

A child weeps quietly in pain; a mother holds back her tears; an old man says his back hurts; a teen-ager says 'Doc, I'm not sick, just wanted to get out of school.'

It's not easy to understand why there are sorrow, hurt, pain, poverty, and unhappiness in the world, when one has such great compassion for the less fortunate. How can we say who is to have and who is not to have? Many people came to Lester for comfort and aid—they were not always

seeking medical assistance, many times they needed him to talk things over with. He gave of his talent, love, financial assistance, and inspirational drive.

The practice of medicine for this humble and gentle man was not just examination, diagnosis, medication, treatment, then home or maybe hospitalization. It went far beyond that—he saw into the hearts and minds of his patients—he was a friend first; a doctor second."

Lester Kashiwa was born in Hana, Maui, on May 12, 1918, to Ryuten and Yuriko Kashiwa.

He received his B.A. degree in 1940 from the University of Hawaii and his Master of Science degree in 1941, and his Medical degree in 1944, from the University of Michigan.

Upon completion of his internship at Queen's Hospital, in Honolulu, Hawaii, he spent two years in the U.S. Army. His tour of duty took him to the Palau Islands. After his discharge from the Army, he associated himself with Dr. K. Izumi in the practice of medicine in Wailuku, Maui. In 1951, he spent a year at the Jefferson Medical School Hospital in Philadelphia, Pa., to take residency training in proctology.

He is survived by his wife, Atsuko, and four children, George, Faye, Dean, and Yuki Lei.

EPILOGUE

Forever now, with you Lester among the stars,
We feel the warmth of Compassion
light up our humble hearts.
We shall remember your Trust—Love all!
Aloha! our dear friend, Aloha.

MAMORU TOFUKUJI, M.D.



Our New President

John Jewett Lowrey, new president of the Hawaii Medical Association, was born in Honolulu, July 2, 1913. His grandfather, Frederick Jewett Lowrey, had been an early member of the firm of Lewers & Cooke; his father, Frederick Lowrey, and his older brother, Frederick P. Lowrey, have both been president of the firm.

John attended Punahou, in the class of 1931; Harvard College (B.A., *cum laude*, 1935); Harvard Medical School, M.D., 1940. He was president of his senior class. He trained in neurosurgery at Peter Bent Brigham and Boston Children's Hospital, and after a little over two years (1945 and 1946) with the U.S. Army Medical Corps, studied neurology for a year at Queen's Square in London.

In 1949 he joined Straub Clinic, where he started (and for 13 years ran, singlehanded!) the department of neurosurgery. Despite this heavy professional burden, he found time for service on so many county and state medical society committees we haven't room to list them, and was chairman of most of them. He was county society president in 1967. After two years on the Council of the HMA, he became our president-elect in 1969.

John married Katy Wishard of Kohala, July 10, 1953, and they have two sons—John J., Jr. ("Packet"), now majoring in business administration at the University of Denver, and Michael Wishard ("Mike"), attending Punahou.

John has been a member of the board of directors of the Chamber of Commerce of Hawaii and the Aloha United Fund; he is on the executive committee of the Hawaii Regional Medical Program; he is a member of the American Academy of Neurological Surgery, the Harvey Cushing Society, the Pan-Pacific Surgical Association, and the Pacific Club; and he is a diplomate of the American Board of Neurological Surgery.

Since John has had a little time for hobbies, he's devoted it mainly to gardening, hiking, and carpentry, at which, like many surgeons, he's very good—so good he builds additions to his house at Wailea beach, on Hawaii.

No member of our Association enjoys a better reputation for fairmindedness, integrity, and devotion to his responsibilities than John Lowrey. We are fortunate to have him in office during this time of stress, with reorganization of the association's management going forward despite the loss of our executive secretary. Welcome to the helm, John! ■

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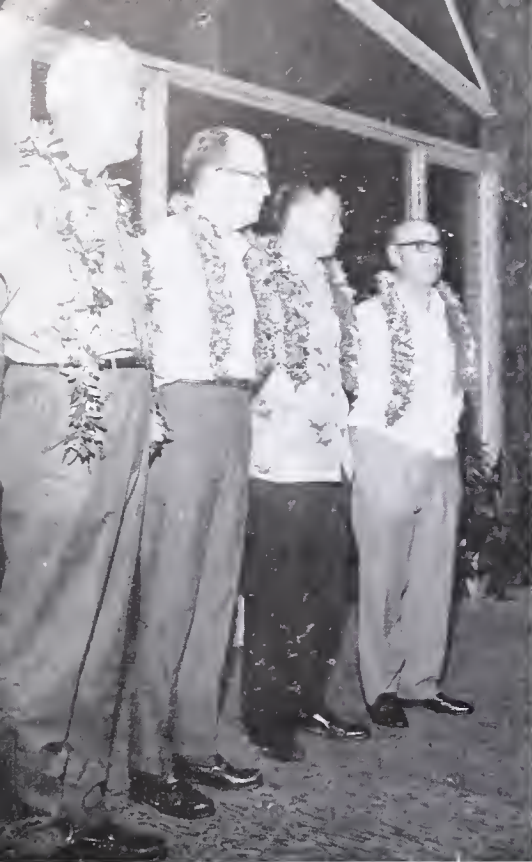
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114TH ANNUAL MEETING HAWAII MEDICAL ASSOCIATION

HONOLULU, HAWAII

May 5-9, 1970

The annual meeting for the one hundred and fourteenth year of corporate existence of the Hawaii Medical Association was held in Honolulu in 1970. The following program was presented:

SCIENTIFIC PROGRAM

PAPERS

Presidential Address

George H. Mills, M.D.

Laboratory Diagnosis of Acid-Base and Fluid Disorders

Richard R. Kelley, M.D.

Treatment of Asphyxia—The Rapid Infusion of Alkali

William H. Tooley, M.D.

Fluid Resuscitation Therapy in the Immediate Postburn Period

John A. Moncrief, M.D.

Pulmonary Physiology—Control of Blood Oxygen

John F. Murray, M.D.

Management of Acute and Chronic Acidosis

William H. Tooley, M.D.

A Rational Approach to the Therapy of Hemorrhagic Shock

John A. Moncrief, M.D.

Routine Postoperative Fluid Therapy

Richard T. Mamiya, M.D.

Hypnotremia—Diagnosis and Therapy

Kenneth D. Gardner, M.D.

Acid-Base Disorders of Acute Pulmonary Insufficiency

John F. Murray, M.D.

Fluid, Electrolytes and Caloric Requirements of the

Prematurely Born Infant

William H. Tooley, M.D.

Long Term Fluid and Nutritional Requirements

in the Burn Patient

John A. Moncrief, M.D.

New Concepts of Diuretic Therapy

Jerome P. Kassirer, M.D.

Clinical Evaluation of the Patient with Renal Disease

Jerome P. Kassirer, M.D.

The Pathogenesis of Metabolic Acidosis in Chronic Renal Disease

Neal S. Bricker, M.D.

Renal Function in Chronic Renal Disease

Neal S. Bricker, M.D.

Hemodialysis and Renal Transplantation

Arnold W. Siemsen, M.D.

On the Control of Sodium Excretion in Chronic Renal Disease

Neal S. Bricker, M.D.

Role of Anions in Acid Base Regulation

Jerome P. Kassirer, M.D.

AMA Presidential Address

Gerald D. Dorman, M.D.

PANEL DISCUSSIONS

Diagnosis and Therapy of Shock

Moderator: Ben Lin Hom, M.D.

Panelists: Richard T. Mamiya, John A. Moncrief,
and William H. Tooley

Case Presentations of Patients with Chronic Renal Disease

Moderator: Arnold W. Siemsen

Panelists: Neal S. Bricker, Jerome P. Kassirer,
and Kenneth D. Gardner

Case I: Hemolytic—Uremic Syndrome

Case II: Diabetes Mellitus with Atonic Bladder and
Papillary Necrosis

Case III: Active Acute Glomerulonephritis for
One Year

SOCIAL PROGRAM

Banquet, Shriners' Country Home, Waimanalo, Hawaii
Sportsmen's Night, Mid-Pacific Country Club, Kailua,
Hawaii

MEETINGS

House of Delegates, Hilton Hawaiian Village
Fireside Chats, Mabel Smyth Building
Woman's Auxiliary, Halekulani Hotel

PARTICIPATING DELEGATES

Hawaii County:

Timothy D. Woo

Kauai County

Katok A. Chuang

Maui County

J. Mark B. Sowers

John F. Morris

Honolulu County

Edwin R. Ballard

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Max G. Botticelli

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Livingston M. F. Wong

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Livingston M. F. Wong

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HAWAII MEDICAL ASSOCIATION—Committees 1969-70

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(1972)
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J. M. B. Sowers (Maui) (1970)

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Wayne S. Limber (1971)
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Cancer Commission Rep.
Drake Will, Cancer Commission Rep.
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R. Frederick Shepard (1972)
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Kenneth Haling (Maui) (1972)

Communicable Disease & Immunization, Venereal Disease & Tuberculosis Committee

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Robert H. Marks (1971)
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Ivar J. Larsen (1970)
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Alfred D. Morris (1972)
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Kazuo Teruya (1972)
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M. L. Chang (Hawaii) (1972)
Katok A. Chuang (Kauai) (1971)
Denis Fu (Maui) (1972)

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Anna Marie Brault, Vice Chairman (1972)
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Walter S. L. Loo (Hawaii) (1970)
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Rodman B. Miller (1971)
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O. D. Pinkerton (1971)
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Jose Romero (Maui) (1971)

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C. Arthur Rossberg (Maui County Treasurer)

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Robert Weiner (1971)
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Bertram A. Weeks (Maui) (1971)

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Robert K. Mookini, Jr.,
Vice Chairman (1972)
Harold Sexton (1972)
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Verne C. Waite (1970)
Winfred Y. Lee, Commissioner
H. E. Crawford (Hawaii) (1971)
Clyde Ishii (Kauai) (1972)
Joseph E. Andrews (Maui) (1970)

Indigent Medical Care Committee

Clifford T. Druceker, Chairman (1970)
Richard K. Blaisdell (1972)
Louise Childs (1972)
Mary A. Glover (1972)
Richard T. Mamiya, Vice Chairman (1970)
James Mertz (1972)
Shigeo Natori (1971)
Kleona Rigney (1970)
Ralph R. Sachs (1972)
Calvin C. J. Sia (1971)
Raymond J. C. Wong (1970)
Richard D. Moore, Commissioner
Verne L. Adams (Hawaii) (1971)
P. M. Cockett (Kauai) (1972)
Kenneth A. Haling (Maui) (1970)

Japanese Speakers Bureau

Noboru Akagi, Chairman (1972)
Takakazu Fukumura (1970)
Keiichi Goshi (1970)
Mitsuo Hattori (1972)
Toshihiko Kawasaki (1972)
Harry H. Nakata (1971)
Shigeo Natori (1972)
Richard Sakimoto (1972)
Emiko Sakurai (1972)
Fumiyu Sugimoto (1972)
Naomitsu Tajima (1971)
Kazushi Tanaka (1972)
Yoshiki Ushiyama (1972)
Tatsuo Watanabe (1972)
Tsuoyoshi Yamashita (1972)
Henry N. Yokoyama, Vice Chairman
(1970)
H. Wm. Goebert, Jr., Commissioner
Theo. T. Oto (Hawaii) (1971)
Kenneth K. Fujii (Kauai) (1972)
K. Izumi (Maui) (1970)

Legislative Committee

Richard K. C. Lee, Chairman (1970)
Richard K. Blaisdell (1972)
Donald F. B. Char (1972)
Clarence F. Chang (1972)
Philip T. Chu (1970)
Richard W. D. Dang (1971)
Cesar B. DeJesus (1972)
H. Wm. Goebert, Jr. (1971)
Roy Kubovama (1972)
P. Howard Liljestrand (1971)
Bal Raj Mehta (1970)
Audrey W. Mertz (1971)
James L. Mertz (1972)
Rodman B. Miller (1972)
Clifford Mirikitani (1972)
Kenneth W. Momeyer (1972)
Richard S. Omura (1970)
F. J. Pinkerton (1971)
Walter B. Quisenberry (1972)
Arturo F. Salcedo (1970)
George F. Schnack, Vice Chairman (1971)
Francis M. Terada (1970)
Theodore T. Tomita (1972)
John R. Watson (1971)
Clarence A. Wvatt, Jr. (1972)
George Goto, Commissioner
John Ze'ko (Hawaii) (1972)
Kenneth K. Fujii (Kauai) (1970)
Clifford F. Moran (Maui) (1971)

Maternal & Perinatal Mortality Study Committee

Ann B. Catts, Chairman (1970)
Mario P. Bautista (1970)
Murray Berger (1972)
G. Brar Koch (1970)
Louise Childs (1972)
George Goto (1971)
Francis M. Ikezaki (1971)
Robert T. S. Jim (1970)
Roy M. Kave (1970)
John A. Krieger (1971)
Frederick S. F. Lee (1970)
Corazon A. Manayan (1971)

Paul F. McCallin (1971)
Arno J. Mundt (1970)
Bunzo Nakagawa (1970)
Herbert M. Nakata (1972)
Shigeo Natori (1970)
Harold Y. Nekonishi (1970)
Noboru Ogami (1970)
John M. Ohtani (1972)
Gordon C. Ontai (1970)
Arthur T. Osako (1971)
Stanley M. Saiki (1970)
Richard Y. Sakimoto (1971)
Millard S. L. Seto (1972)
Walton K. T. Shim (1971)
Calvin C. J. Sia, Commissioner
Francis H. Soon (1970)
Francis M. Terada (1970)
Mitsuo Tottori (1970)
Theodore K. L. Tseu (1970)
Herbert S. Uemura (1970)
Hau N. Vu (1971)
Sorrell H. Waxman (1971)
James T. S. Wong (1970)
Paul J. Caldwell (Hawaii) (1971)
Clyde H. Ishii (Kauai) (1971)
H. Lawrence Allred (Maui) (1971)

Medical Care Plans & Fees Committee

Benjamin C. K. Tom, Chairman (1972)
William W. L. Dang, Vice Chairman (1970)
Raymond M. deHay (1972)
Gail G. L. Li (1971)
Wallace W. S. Loui (1972)
Carl H. Lum (1970)
Paul McCallin (1972)
Robert K. Mookini, Jr. (1971)
Shigeo Natori (1972)
Noboru Oishi (1970)
Robert W. Peyton (1971)
Ralph R. Sachs (1972)
Theodore T. Tomita (1972)
Richard D. Moore, Commissioner
William N. Bergin (Hawaii) (1970)
Samuel R. Wallis (Kauai) (1971)
William E. Iaconetti (Maui) (1972)

Medical Education Committee

Max G. Botticelli, Chairman (1970)
H. H. Chun (1972)
Raymond H. Fujikami (1970)
Norman Goldstein (1971)
Lawrence H. Gordon (1972)
George Goto (1970)
John A. Krieger (1972)
T. K. Lin (1972)
Richard Mamiya (1971)
Robert A. Nordyke, Vice Chairman
(1972)
Robert W. Noyes (1972)
Daniel D. Palmer (1970)
Harry C. Shirkey (1972)
Patrick J. Walsh (1972)
Sorrell H. Waxman (1972)
Winfred Y. Lee, Commissioner
George Bracher (Hawaii) (1970)
M. A. Brennecke (Kauai) (1971)
John F. Morris (Maui) (1972)

Medical Practice Act Committee

Theodore T. Tomita, Chairman (1972)
Calvin C. M. Kam (1972)
Mor J. McCarthy (1972)
Clifford K. Mirikitani (1972)
William J. Natoli (1972)
Noboru Oishi, Vice Chairman (1972)
Walter B. Quisenberry (1970)
B. Allen Richardson (1970)
George F. Schnack (1972)
George Goto, Commissioner
Theo. T. Oto (Hawaii) (1971)
Casper Rea (Kauai) (1972)
Sakae Uehara (Maui) (1970)

Medicine and Religion Committee

Francis H. Soon, Chairman (1970)
Howard Honda (1970)
Maurice Howell, Vice Chairman (1971)
Mor J. McCarthy (1970)
Wilfred T. Ohta (1971)
Robert W. Peyton (1972)
H. Wm. Goebert Jr., Commissioner
James A. Mitchel (Hawaii) (1970)
Eugene Rames (Kauai) (1971)
Robert B. Bjornson (Maui) (1972)

Mental Health Committee

K. Y. Lum, Chairman (1970)
Duke Cho Choy (1970)
Edward F. Furukawa (1971)

Maurice Howell (1972)
Francis M. Ikezaki (1972)
Audrey W. Mertz (1970)
Miguel R. Rivera (1971)
William H. Sage (1972)
Leigh Sakamaki (1970)
George F. Schnack, Vice Chairman (1971)
Robert Weiner (1972)
William W. T. Won (1970)
Calvin C. J. Sia, Commissioner
Charles H. Belcher (Hawaii) (1971)
Joan J. Takeuchi (Kauai) (1972)
Charles W. Stewart, Jr. (Maui) (1970)

Message of the Month Committee

William F. Moore, Jr., Chairman (1970)
Gail G. L. Li (1972)
John Roberts (1970)
Kazuo Teruya, Vice Chairman (1971)
H. Wm. Goebert, Jr., Commissioner
Ruth E. Oda (Hawaii) (1972)
Patrick M. Cockett (Kauai) (1970)
J. M. B. Sowers (Maui) (1971)

National Legislation Committee

Cesar B. DeJesus, Chairman (1971)
Donald F. B. Char (1972)
Bernard W. D. Fong (1972)
Richard K. C. Lee (1971)
Wilbur S. Lummis, Vice Chairman (1972)
L. Q. Pang (1970)
Don E. Poulson (1971)
Theodore T. Tomita (1972)
George Goto, Commissioner
Verne L. Adams (Hawaii) (1970)
Clyde H. Ishii (Kauai) (1971)
Clifford Moran (Maui) (1972)

Negotiating Committee

Chew Mung Lum, Chairman (1970)
Grover H. Batten, Vice Chairman (1971)
B. Allen Richardson (1970)
Theodore T. Tomita (1972)
Richard D. Moore, Commissioner
Walter S. L. Loo (Hawaii) (1972)
Yonemichi Miyashiro (Kauai) (1970)
J. M. B. Sowers (Maui) (1971)

News Media Committee

Henry N. Yokoyama, Chairman (1970)
John Ronald Brown (1972)
Claude V. Caver, Vice Chairman (1972)
Ellis F. Devereux (1970)
Rowlin L. Lichter (1971)
Bal Raj Mehta (1972)
J. I. F. Reppun (1970)
Alexander Roth (1971)
Stephen H. Tenby (1972)
H. Wm. Goebert, Jr., Commissioner
Keith Nesting (Hawaii) (1972)
W. W. Goodhue (Kauai) (1970)
Robert G. B. Bjornson (Maui) (1971)

Nominating Committee

William W. L. Dang, Chairman
Thomas P. Frissell
B. Allen Richardson
Theodore T. Tomita
Coolidge S. Wakai
Walter S. L. Loo (Hawaii)
William E. Iaconetti (Maui)
Albert C. Johnston (Kauai)

Nurses Liaison Committee

H. H. Chun, Chairman (1970)
Stanley E. Batkin (1970)
William G. Davis (1971)
William H. Hindle, Vice Chairman (1972)
Mary A. Glover (1972)
Arthur V. Molyneux (1972)
Ronald D. Moore (1970)
Robert H. Oishi (1971)
H. Wm. Goebert, Jr., Commissioner
Tokuso Taniguchi (Hawaii) (1972)
Robert Emrick (Kauai) (1970)
Joseph E. Andrews (Maui) (1971)

Operation Pacific Committee

George Suzuki, Chairman (1972)
L. Clagett Beck (1971)
Edward W. Boone (1972)
Anna Marie Brault (1972)
Claude V. Caver (1970)
Frederick A. Dodge (1972)
Unoji Goto (1971)
William J. Holmes (1972)

Paul McCallin (1972)
Robert W. Peyton (1970)
Thomas H. Richert (1970)
Francis M. Terada (1972)
Benjamin C. K. Tom, Vice Chairman (1972)
H. Wm. Goebert, Jr., Commissioner
Paul J. Caldwell (Hawaii) (1971)
Katok Chuang (Kauai) (1972)
Milton M. Howell (Maui) (1970)

Pharmacy Committee

John F. Chalmers, Chairman (1970)
Ralph B. Berry (1971)
Frederick S. F. Lee (1972)
Willard Y. Miyahira (1970)
Daniel D. Palmer, Vice Chairman (1971)
Harry C. Shirkey (1972)
George Goto, Commissioner
Reginald S. Carvalho (Hawaii) (1972)
Robert J. Emrick (Kauai) (1970)
J. M. B. Sowers (Maui) (1971)

Publications Committee

Richard T. Mamiya, Chairman (1971)
Samuel D. Allison (1970)
Harry L. Arnold, Jr., ex officio
Herbert Y. H. Chinn, Treasurer
Robert L. Creveling (1971)
Norman Goldstein (1970)
Meryl Haber (1972)
Frank McDowell (1970)
K. S. Tom (1972)
Walter S. Yokoyama (1972)
John J. Lowrey, President-elect
George H. Mills, President
R. Varian Sloan, Secretary
Herbert Y. H. Chinn, Treasurer
Winfred Y. Lee, Commissioner
R. P. Henderson (Hawaii) (1972)
Kenneth K. Fujii (Kauai) (1970)
Frank A. St. Sure (Maui) (1971)

Public Relations Committee

Cesar B. DeJesus, Chairman (1970)
Stanley E. Batkin (1970)
John Ronald Brown (1972)
Claude V. Caver (1972)
Robert C. H. Chung (1971)
Richard W. D. Dang (1972)
Fred I. Gilbert, Jr. (1971)
Rowlin L. Lichter, Vice Chairman (1972)
P. Howard Liljestrand (1970)
Forrest J. Pinkerton (1972)
O. D. Pinkerton (1971)
John Watson (1972)
Henry N. Yokoyama (1970)
H. Wm. Goebert, Jr., Commissioner
William N. Bergin (Hawaii) (1971)
Charles Custer (Kauai) (1972)
Robert G. B. Bjornson (Maui) (1970)

Quackery Committee

William H. Sage, Chairman (1970)
Frederick A. Dodge, Vice Chairman (1971)
Reginald C. S. Ho (1970)
Carl E. Johnsen, Jr. (1971)
Maurice W. Nicholson (1970)
Hideo Oshiro, Vice Chairman (1971)
Kleona Rigney (1972)
Harry C. Shirkey (1972)
Francis H. Soon (1971)
Walter S. Yokoyama (1972)
H. Wm. Goebert, Jr., Commissioner
Shizuto Mizuire (Hawaii) (1970)
Yonemichi Miyashiro (Kauai) (1971)
Clifford Moran (Maui) (1972)

Radiation Committee

George W. Henry, Chairman (1970)
Thomas C. Brown (1972)
Russell E. Graf (1970)
Hans W. Graumann (1971)
William J. Natoli (1970)
Robert A. Nordyke, Vice Chairman (1971)
Robert G. Rigler (1972)
J. C. Wang (1972)
Calvin C. J. Sia, Commissioner
George Bracher (Hawaii) (1970)
A. C. Johnston (Kauai) (1971)
Robert B. Bjornson (Maui) (1972)

School Health Committee

Roy Kuboyama, Chairman (1972)
Donald F. B. Char (1972)
Louise S. Childs (1970)
David T. Eith (1972)
Mary A. Glover (1972)

Michael F. Hase (1971)
Felix J. Lafferty (1970)
Donald C. Marshall (1971)
William F. Moore, Jr., Vice Chairman (1970)
John H. Peyton (1972)
Leigh Sakamaki (1972)
Stephen H. Tenby (1970)
Raymond J. C. Wong (1971)
Ann Barbara Ho Yee (1972)
Calvin C. J. Sia, Commissioner
Ruth Oda (Hawaii) (1972)
P. M. Cockett (Kauai) (1970)
James F. Fleming (Maui) (1971)

Scientific Program Committee

Herbert S. Uemura, Chairman (1972)
Daniel M. Baer (1972)
Richard K. Blaisdell (1970)
Mitsuo Hattori (1972)
Reginald Ho (1972)
Richard K. B. Ho (1971)
Glenn Kokame (1972)
John Krieger (1972)
Wilbur S. Lummis (1972)
Richard T. Mamiya (1972)
Noboru Oishi (1972)
Buenaventura E. Realica (1971)
Millard Seto (1972)
Walton K. T. Shim (1972)
Arnold Siemsen, Vice Chairman (1972)
R. Varian Sloan (1970)
K. S. Tom (1971)
Sorrell Waxman (1972)
Edward Y. Yamada (1972)
Coolidge S. Wakai, Commissioner
Harold Lewis (Hawaii) (1970)
Eugene Rames (Kauai) (1971)
K. B. McCullom (Maui) (1972)

Television-Radio Committee

Theodore K. L. Tsen, Chairman (1971)
Claude V. Caver (1971)
Clifford B. G. Chang, Vice Chairman (1970)
Cesar B. DeJesus (1972)
Robert T. S. Jim (1971)
Robert Lee, Jr. (1970)
Rowlin L. Lichter (1972)
George H. Nip (1971)
Miguel Rivera (1970)
Herbert Uemura (1970)
Philip Watt (1970)
Tsuyoshi Yamashita (1972)
Henry N. Yokoyama, Vice Chairman (1972)
Walter K. W. Young (1972)
H. Wm. Goebert, Jr., Commissioner
Tokuso Taniguchi (Hawaii) (1972)
W. W. Goodhue (Kauai) (1970)
Robert G. B. Bjornson (Maui) (1971)

Water Safety Committee

Roger B. Brault, Chairman (1971)
Arno J. Mundt (1970)
Michael M. Okiihiro, Vice Chairman (1970)
Francis Terada (1972)
Calvin C. J. Sia, Commissioner
Pete T. Okumoto (Hawaii) (1971)
Peter Kim (Kauai) (1972)
Ken McCullom (Maui) (1970)

Woman's Auxiliary Committee

Jerome L. Tucker, Chairman (1972)
Gordon Y. H. Chang (1970)
Philip M. Corboy, Vice Chairman (1970)
Victor Hay-Roe (1970)
Harold G. Lawson (1971)
H. Wm. Goebert, Jr., Commissioner
Shizuto Mizuire (Hawaii) (1972)
Joan J. Takeuchi (Kauai) (1970)
Sakae Uehara (Maui) (1971)

Workmen's Compensation Committee

Theodore T. Tomita, Chairman (1972)
Edward L. Chesne (1970)
William W. L. Dang (1972)
Raymond C. Dusendschon (1971)
Lawrence H. Gordon (1972)
Francis M. Ikezaki (1970)
Kiyoshi Inouye (1971)
Calvin C. M. Kam (1972)
Herbert K. N. Luke, Vice Chairman (1972)
Donald K. Maruyama (1970)
Robert K. Mookini, Jr. (1971)
Maurice Nicholson (1972)
Noboru Oishi (1972)
Don E. Poulson (1970)

Richard D. Moore, Commissioner
Verne L. Adams (Hawaii) (1970)
W. W. Goodhue (Kauai) (1971)
Robert B. Bjornson (Maui) (1970)

**Ad Hoc Committee to Coordinate
AMA Clinical Session in Honolulu**

R. Varian Sloan, Chairman
Harry L. Arnold, Jr.
A. S. Hartwell
William E. Iaconetti (Maui)
Homer Izumi
David Wm. Jones (Hawaii)
Yonemichi Miyashiro (Kauai)
Richard D. Moore
F. J. Pinkerton
Theodore T. Tomita

**Ad Hoc Committee to Develop HMA
Position on Drug Abuse**

John R. Stephenson, Chairman
Robert Bell
Donald F. B. Char
Frederick A. Dodge
H. Wm. Goebert, Jr.
Felix J. Lafferty
B. R. Mehta
Audrey W. Mertz
Kleona Rigney
Calvin C. J. Sia
Sorrell Waxman
Walter E. Batchelder (Hawaii)
Albert C. Johnston (Kauai)
Dorothy N. La Fon (Maui)

Ad Hoc Committee to Study RMP

Richard D. Moore, Chairman
Morton E. Berk
Winfred Y. Lee
John J. Lowrey
Chew Mung Lunt
George H. Mills
Joseph Oren
John Zelko (Hawaii)
Eugene Rames (Kauai)
John F. Morris (Maui)

Ad Hoc Search Committee

William E. Iaconetti, Chairman
Herbert Y. H. Chinn
R. Varian Sloan
John Zelko (Hawaii)
Patrick M. Cockett (Kauai)

PROCEEDINGS OF THE HOUSE OF DELEGATES

114th Annual Meeting of the Hawaii Medical Association

The first session of the House of Delegates of the Hawaii Medical Association was called to order by the president, George H. Mills, at 1:00 P.M., May 6, 1970, in the Coral Ballroom of the Hilton Hawaiian Village.

Present were (officers) George H. Mills, John J. Lowrey, R. Varian Sloan, and Herbert Y. H. Chinn; (county presidents) George Bracher, Richard S. Omura, Gonzalo Geroso, and Sakae Uehara; (councilors) David Wm. Jones, Grover H. Batten, William W. L. Dang, Richard D. Moore, Yonemichi Miyashiro, and William E. Iaconetti; (Honolulu delegates) Douglas B. Bell, Max Botticelli, Ann B. Catts, Albert Chun-Hoon, George M. Ewing, Thomas P. Frissell, William Goebert, Jr., George Goto, Richard K. B. Ho, Gordon Liu, Michael M. Okihiro, Robert A. Rose, Niall M. Scully, Calvin C. J. Sia, Benjamin C. K. Tom, Philip H. F. Watt, Walter H. K. Watt, Sorrell H. Waxman, and Livingston M. F. Wong; (Kauai delegate) Katok Chuang; (Maui delegates) John F. Morris and J. Mark B. Sowers; (Hawaii delegate) Timothy D. Woo, and AMA alternate, Theodore T. Tomita.

Honolulu president, Richard S. Omura, asked that the following alternate delegates be seated to complete Honolulu County's delegation: Edwin R. Ballard for William W. L. Dang, Clifford B. G. Chang for Frederick A. Dodge, Winfred Y. K. Chang for Reginald C. S. Ho, Gerald Faulkner for Edward L. S. Jim, Robert Katsuki for Gail G. L. Li, Frances Nakamura for Alfred D. Morris, and Raymond deHay for Dudley S. J. Seto.

Hawaii president, George Bracher, asked that alternate delegate Timothy D. Woo be seated for Haruto Okada.

The minutes of the May 21-24, 1969, meeting were approved as published.

Dr. William W. L. Dang was appointed parliamentarian. Dr. Max Botticelli and Dr. Raymond deHay were appointed sergeants-at-arms.

Dr. R. Varian Sloan read Resolution No. 10 to the House.

RESOLUTION NO. 10

Re: In Memoriam of Robert T. Miyamoto, M.D.

WHEREAS, The death of Dr. Robert T. Miyamoto on April 30, which on personal grounds has brought sorrow to the hearts of the members of the Hawaii Medical Association and his many friends; and

WHEREAS, Dr. Miyamoto in his lifetime conferred distinction on the entire medical profession through his intelligence, firmness, fairness, judgment, integrity, diligence, and achievement in both medical and nonmedical fields; and

WHEREAS, Dr. Miyamoto undertook the presidency of the Hawaii Medical Association in 1968 during which time he developed his terminal disease; and

WHEREAS, Dr. Miyamoto served the medical profession tirelessly without concern for himself and presided with dignity and courage at the annual meeting in Hilo; now therefore be it

Resolved, That the House of Delegates dedicate this meeting to the memory of this fine physician, husband, and father—Dr. Robert T. Miyamoto.

Submitted by GEORGE H. MILLS, M.D.

ACTION:

It was voted that Resolution No. 10 be adopted by acclamation and that it not be referred to a Reference Committee.

The reports of the President, Secretary, and Treasurer as well as those of Hawaii, Honolulu, Maui, and Kauai County Societies were in the Delegates' Handbook and were referred as indicated. The reports of the standing and special committees were referred to the reference

committees as previously announced. Resolutions 5, 8, and 9 were referred to the Reference Committee on Insurance and Medical Services; resolution 7 was referred to the Reference Committee on Miscellaneous Business, and resolution 6 was referred to the Reference Committee on Parliamentary Affairs. The president requested that resolutions 3 and 4 not be referred to a Reference Committee and announced they would be presented during the second day of the House of Delegates.

Dr. Winfred Chang and Dr. Frances Nakamura were asked to serve on the Reference Committee on Public Health to replace Dr. Reginald Ho and Dr. Alfred Morris. Dr. Timothy Woo was asked to replace Dr. Reginald Carvalho on the Reference Committee on Insurance and Medical Service. Dr. Edwin R. Ballard was asked to serve on the Reference Committee on Miscellaneous Business to replace Dr. William Goebert. Dr. Clifford Chang was asked to serve on the Reference Committee on Parliamentary Affairs to replace Dr. Frederick A. Dodge.

Dr. R. Varian Sloan noted there was an addendum to the Secretary's Report and read the addendum to the House.

It was voted to reconvene the House of Delegates on May 7, 1970, at 2:00 P.M.

The Reference Committees were in session May 6, beginning at 1:30 P.M.

The second session of the House of Delegates was called to order on Thursday, May 7, 1970, at 2:00 P.M. The secretary called the roll.

Dr. Bernard Fong was present for the second session. The Hawaii County president asked that Dr. James Mitchell be seated to replace Reginald Carvalho. Dr. Richard D. Moore, Councilor, was absent the second day.

Dr. Gerald Dorman, president of the American Medical Association, was introduced and asked to say a few words to the members of the House.

Mr. Jackson Lee, Assistant Administrator for Medicare Claims for Aetna Insurance Company, was asked to address the House of Delegates.

PUBLIC HEALTH REFERENCE COMMITTEE

Mr. President and Members of the House of Delegates:

Your Reference Committee met before an audience of interested physicians and guests. It received testimony on the resolution and reports submitted to the committee for consideration and recommendation. Having heard the discussion of the witnesses and having given careful consideration to all the testimony presented to it, your Reference Committee is pleased to make the following report:

AUTOMOTIVE SAFETY

The committee has had the job of studying legislation pertaining to health aspects of automobile safety, working with other committees concerning traffic safety and emergency care service, and assisting the Public Utilities Commission on physical examination standards. It has not been necessary to be very active in any of these aspects this year.

The committee participated in a very successful television show on "Christmas, Cars, and Crashes" as part of the "Medically Speaking . . ." series. It has seen fruition of previous efforts to establish a Medical Advisory Board on Driver Licensing although the Governor did not choose to use the Board that was set up for him last year.

RECOMMENDATION: The committee should continue along the same lines as in the past, except with more stress on education of the public and other doctors, and with the additional duty of cooperating and consulting with the Medical Advisory Board that was recently appointed by the Governor.

TRUETT BENNETT, M.D.

Automotive Safety

Your Reference Committee first considered the Automotive Safety Committee Report. No one appeared to discuss this report. Your committee recommends approval of this report and its recommendations. In addition, we recommend that the committee study automotive inspection enforcement and driver education.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CHRONIC ILLNESS AND AGING

The committee held six meetings in the past year. A reply was sent to the Pennsylvania Medical Society relative to a proposed meeting on chronic illness and aging to meet prior to the coming White House Conference.

The chief concern of the committee was in relation to the proposed 1971 HMA annual meeting with a program on chronic illness and aging under the topic "New Challenges to Chronic Disease." A sample program was submitted to the HMA Program Committee.

It was recommended that a member of this committee be appointed to the Governor's Commission on Aging, and Dr. Ralph Sachs was so appointed.

Dr. Robert Mytinger reviewed the proposed program by the Health Committee of the Governor's Commission on Aging, serving medical facilities for older people. The program proposes a one-day check on all medical facilities to be headed by the physicians of the HMA.

Three bills before the State Legislature were presented to the committee. It was decided that those bills did not specifically concern the Association, that it was the concern of the community health agencies, and no action was recommended.

L. CLAGETT BICK, M.D.

Chronic Illness and Aging

Your Reference Committee next considered the report of the Chronic Illness and Aging Committee and recommends approval of this report. It commends the committee for its efforts in this important area.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MATERNAL & PERINATAL MORTALITY STUDY

The committee met a total of five times to study and discuss six maternal deaths and the four perinatal deaths which were presented to it from the cases reviewed by the steering committee. The committee's review of maternal deaths is seriously compromised by the removal of the statement of pregnancy on the death certificates. Unless the pregnancy is mentioned in the cause of death, maternal deaths cannot be recognized by screening the death certificates.

This committee acts as a liaison between the HMA and State Department of Health, and as such considered problems brought to it by that Department. In the future it would appear that much more contact and communication will be necessary, especially in the field of family planning. Greater representation on the committee by physicians actually engaged in this field would seem desirable.

The structure and function of the committee were reviewed and compared to similar committees in other states. A proposed change in the present system of case review and study will be suggested to next year's committee.

RECOMMENDATIONS: (1) That the HMA request the reinsertion of a pregnancy statement on the death certificate. (2) That the scope of the committee be enlarged to include family planning and any other related subjects, at the same time including more general practitioners on the committee; and that such a committee be

designated as the Maternal & Perinatal Care Committee (retaining the functions of the present Maternal & Perinatal Mortality Study Committee as well as the newly proposed functions).

ANN B. CATTS, M.D.

Maternal and Perinatal Mortality Study

Your Reference Committee then considered the report on Maternal and Perinatal Mortality Study. The committee strongly endorsed the first recommendation and was given assurance from representatives of the Department of Health that this will be implemented. The committee also recommends changing the second recommendation to "That the scope of the committee be enlarged to include family planning and other related subjects, at the same time including more general practitioners on the committee, and that the Department of Health should be asked to consult with the above committee in all important maternal and perinatal matters."

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

DIABETES

Screening for Diabetes: Kauai completed their diabetic survey in October using dextrostix. In addition, blood analysis was also carried out in positive cases using both the standard method and the dried filter paper method for blood sample collection. Analysis of data is still not complete. Maui, Hawaii, and Oahu completed their surveys in October and November using dextrostix.

LOCATION	TOTAL SCREENED	NO. POS. DEXTROSTIX	NO. POS. AUTOANALYZER
Kauai County	2,076	58	49
Honolulu County	2,616	106	89
Hawaii County	3,797	143	73
Maui County	1,252	68	58

Screening and Diagnostic Criteria, a pamphlet edited by the New Jersey State Department of Health, was obtained by the committee and distributed to the physicians in Hawaii. It describes testing methods for the diagnosis of diabetes mellitus, and the criteria for proper interpretation of data.

Hawaii Diabetic Diet Manual was reviewed by the committee after its recent revision. It is available to physicians and their patients at the State Department of Health, Nutrition Branch.

Testing of Adolescent Children: Inquiries to established institutions on the mainland (including the American Diabetes Association) revealed no data on surveys of adolescents. A pilot project is being undertaken to see whether such testing is feasible since the yield is known to be low. However, detection at this early age would be most beneficial from the standpoint of epidemiology and early therapy. Preliminary plans have been set up for May, 1970, using Clinistix two-hour post prandial instead of blood, since the renal threshold in children is low. Approximately 3,000 children will be tested at one school.

Camp for Diabetic Children: This year the program was expanded to include both boys and girls. Again the emphasis was to maintain normal association between the diabetic and nondiabetic children campers. The staff members felt that the children developed a sense of self-sufficiency and learned to administer their own insulin. The HMA Diabetes Committee directed the joint effort of the Hawaii Dietetic Association, the YWCA, and the Hawaii Lay Diabetic Society who were largely responsible for making the camp a success.

Additional Project: The University of Hawaii Dietary Department sent five of their recent graduates to serve as dietetic interns at the camp. Reports were most favorable, and plans are being made to establish a teaching program both for the children and the dietetic students. Expenses for room and board for the staff and scholar-

ships for several children were borne by the Hawaii Lay Diabetic Society, totaling \$300.00.

Unfinished Business: The detection program for the South Pacific Islands is still being worked on to consider the most suitable method of blood sample collection.

RECOMMENDATIONS: (1) That the HMA continue to encourage the county societies to take leadership in conducting diabetes detection programs. (2) That the committee continue to look into pilot programs which can be beneficial to the community. (3) That the committee stimulate participation by lay members of the community, such as the Hawaii Lay Diabetic Society, who can continue to perpetuate useful programs once established by the committee.

WILLARD Y. MIYAHIRA, M.D.

Diabetes

Your Reference Committee then considered the report of the Diabetes Committee and recommends adoption of the three recommendations. The committee also recommends that the Diabetes Committee study and evaluate various screening methods of diabetic detection to be able to cover larger populations and to improve the detection yield of persons with this disease.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HEART

Meetings were held twice during the year. The first was called to consider the Hawaii Heart Association proposed heart-sound screening program for school children. The committee approved the concept.

A second meeting was called to review an application to the Regional Medical Program for a mobile coronary care project. It was decided by vote that this proposal should be re-examined at a future date since there are numerous studies in progress across the nation at this time.

JOHN F. HANLEY, M.D.

Heart

The committee then considered the report of the Heart Committee and accepted the first paragraph. There was considerable discussion about the application to the Regional Medical Program for the Mobile Coronary Care Project and felt that the report should have further clarified why this proposal should be re-examined at a future date since many of these projects in other localities have proven to be successful.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

ENVIRONMENTAL HEALTH

This committee was assigned to the Public Health Commission. Its members have not yet been named.

Environmental Health

Your Reference Committee then considered the report on Environmental Health and received an explanation from the President on why this committee should be assigned to the Public Health Commission. We feel that the subject of environmental health is important and needs further study in the coming year.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

SCHOOL HEALTH

The committee held regular monthly meetings and special meetings as necessary during the past year. The

committee set up as its aim (1) carry out the recommendations made by the School Health Committee of 1968-69; (2) establish a direct line of communication with the Superintendent of the Department of Education, Mr. Ralph Kiyosaki; (3) include on our committee members outside the medical profession who are interested in school health so that coordinated efforts toward common goals could be obtained.

Family Living and Sex Education: The committee was represented on the Advisory Panel for the Guidance/Family Life and Sex Education under the Department of Education. The DOE is implementing the School Health Education Study (SHES) program which is a K-12 curriculum to be implemented over the next five years. This program consists of ten concepts developed on four levels. This year's concern was with Concept 9 which deals with modified mood and behavior and Concept 6 which deals with the concept that the family serves to perpetuate man and fulfill certain health needs for use in grades 7, 8, and 9. The Advisory Panel reviewed a mainland series "Breakthrough" which deals with moral and ethical values for 4th, 5th, and 6th graders and accepted the series for local use. To give emphasis to parts of Concept 9 which will meet local needs, a local ETV production "Seasons of Change" was completed. This production includes programs relating to smoking, alcohol, glue and paint sniffing, marijuana, and other drugs and narcotics. Concept 6 included programs such as "The Family in a Changing World," "Sexuality," "Dating," "Personal Hygiene," "Sex and Responsibility," and "Health and the Family."

Funds have been appropriated for the printing of a pamphlet on family living and sex education which was prepared by a subcommittee chaired by Dr. William Moore, Jr. The pamphlet will be printed and distributed to all practicing physicians, schools, and other community groups.

Department of Education Liaison: Mr. Ralph Kiyosaki, Superintendent of the Department of Education, sent Miss Margaret Oda, Director of General Education, and later Miss Evelyn Murashige, Director of Special Programs, as his representative to committee meetings. Through his representatives, valuable information necessary to carry out a better school health program was possible.

Pilot Program to Provide Health Services at Public Schools: The committee invited members from the Hawaii Nurses Association, Hawaii Congress of PTA, Department of Health, Department of Education, Red Cross, to work with the Health and Community Services Council of Hawaii to rewrite a proposal submitted to the Legislature last year on a pilot project to provide health services at public schools (SB 628). The participating organizations approved a bill, after seven months of meetings, which was submitted to the 1970 Legislature (HB 1840 and SB 1728). The bill establishes a two-year pilot project to provide health services at three public high schools and those intermediate and elementary schools which feed into each of these respective high schools. There will be a public health nurse at each high school and a nurses aide at all feeder units. The three high schools selected to participate in the pilot project will reflect an urban, suburban, and rural community setting and will be selected by the School Health Service Advisory Committee. Each health aide shall be under the supervision of the public health nurse and shall be responsible to the respective school principal. The Department of Health, School Health Branch, will be responsible for the medical and nursing supervision for the pilot project. The project will be administered by the Department of Education and the Department of Health through an interdepartmental agreement in cooperation with the School Health Service Advisory Committee. The Advisory Committee will be appointed by the Governor and will consist of members from state and community organizations interested in school health. The Advisory Committee will coordinate, guide, and evaluate the pilot project and shall report the progress and experience of the project to the 1971 session of the Legis-

lature. A full report and recommendations for expansion, improvement, curtailment or discontinuance of the project shall be made to the 1972 session of the Legislature. The appropriation for the bill will come from general revenues of the State. Dr. Calvin Sia, Commissioner on Public Health, testified for the HMA at the House and Senate committee hearings and has worked diligently for the passage of the bill. As this report is being written, the Legislature is still in session. The bills are in the House Finance Committee and the Senate Ways and Means Committee and it would appear the measures will pass.

Sports Medicine: The School Health Committee approved the AMA Resolution 112 regarding Athletic Sports Medicine. As a result, Dr. Norman Nakamura joined the committee and serves as the liaison member to committee in the DOE studying the reorganization of the public high school athletic program. A three-phase master plan was begun in January, 1970. Dr. Nakamura has participated in Phase 1 and 2 of the plan.

Phase 1 is aimed at bringing about school and community understanding of the problems and potentials of the interscholastic athletics program. It is aimed at providing the philosophical basis for improving athletic competition in the State and for identifying the issues which must be resolved if the DOE is to develop and install in all the high schools an improved program of interscholastic athletics.

The second phase will undertake several in-depth studies of the issues identified in the Phase 1 study. The third phase will be aimed at development of specific statements on policy and strategy which will give definite form and substance to a long term plan. These statements will appear in a guide.

The third phase will be completed by August 30, 1970. It is hoped that through the athletic medicine unit, to be composed of physicians, the athletic health coordinator (trainer) and other necessary personnel, the prevention of injuries and rehabilitation of the injured can be accomplished.

A list of Disqualifying Conditions for Contact and Noncontact Sports was sent to the membership of the HMA.

School Health Forms: The committee maintained the current Department of Health's Form 14 and approved the new Form 15. A new physical examination form is being completed by a subcommittee chaired by Dr. William Moore, Jr. with Drs. John Peyton and Stephen Tenby.

RECOMMENDATIONS: (1) That the HMA continue to support the DOE in the development of the family living and sex education programs from kindergarten to twelfth grades with the endorsement of the locally produced ETV series "Seasons of Change." (2) That the HMA endorse the current legislative proposal for the pilot program to provide health services at public schools (SB 1728, HB 1840). (3) That the HMA endorse Resolution No. 1 relating to Athletic Medicine Units submitted by the School Health Committee.

ROY KUBOYAMA, M.D.

School Health

Your Reference Committee then considered the lengthy report on the School Health Committee and accepted the three recommendations. Further, this Reference Committee recommends development of a uniform health card valid for several years to replace the necessity for multiple unnecessary physical examinations requested by community organizations before engaging in their activities. We further recommend that the cost of these cards be budgeted by Hawaii Medical Association funds.

ACTION:

The Chairman moved adoption of this portion of the report. There was lengthy discussion regarding the length of validity for uniform health cards and it was recommended that recommendation 4 be added to read: That a uniform health card be developed, the validity of

which is to be determined by the School Health Committee, in order to eliminate the necessity for multiple unnecessary physical examinations requested by community organizations and others; and that the School Health Committee undertake the development of these cards to be presented to the House of Delegates next year. The Chairman moved adoption of this portion of the report. It was adopted.

COMMUNICABLE DISEASE AND IMMUNIZATION, VENEREAL DISEASE, AND TUBERCULOSIS

Tuberculosis: The committee approved the plan of requiring chest x-rays before granting an extension of visitors' visas or a change in classification of nonimmigrant visas. Letters on this subject were sent to our Congressmen.

Immunization: Endorsed the Department of Health's proposed amendments to Chapter 7 of Public Health Regulations in regards to "Examination, Vaccination, and Immunization" which is on file in the Association's office.

Rubella: (a) Endorsed the mass immunization program to include all elementary school children and pre-school children over one year of age. (b) Encouraged all HMA members to help in the immunization program when requested.

L. T. CHUN, M.D.

Communicable Disease and Immunization, Venereal Disease, and Tuberculosis

Your Reference Committee next considered this important report and accepted it. It further discussed the role of the Department of Health in recent communicable disease outbreaks and recommends better liaison with local and state medical societies in order to expedite prompt evaluation of communicable disease problems. It further recommends the strict enforcement of existing public health laws or, if necessary, proposal of new laws to cope with current public health problems.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MENTAL HEALTH

This year the Mental Health Committee completed the following projects:

(1) Psychiatrists' income survey was conducted by a member of the Mental Health Committee, Dr. George Schnack, and the results of the survey were forwarded to Dr. George Mills for his information. This survey was conducted to obtain an estimate of relative incomes (in relation to past years) of psychiatrists in private practice so that the HMA, in dealing with any agencies or organizations interested in psychiatric fees, would have at least an idea of how psychiatrists' fees in private practice compare with past years. Average fees and income figures were also obtained in the survey.

(2) Talks were held with HMSA representatives regarding the two resolutions submitted by the Mental Health Committee and adopted by the 1969 House of Delegates; namely, those resolutions regarding third party payment of mental health services performed by psychologists and nonpsychiatric physicians. Word was received from the HMSA that inclusion of these benefits would be considered the next time benefit improvements are made in the HMSA program.

(3) An NIH grant application was submitted for a multi-disciplinary project in continuing education for both medical and paramedical personnel in mental health. Part of our current grant in continuing education has been used for planning the feasibility of such a program. This work was largely stimulated and is being carried on under the aegis of Dr. George Schnack.

(4) Members of the committee participated with the School Health and Drug Abuse Committees in putting on

a seminar on drug abuse this spring.

(5) Continuing education of nonpsychiatric physicians in mental health matters was carried on by members of this committee in cooperation with the Hawaii Association of General Practitioners. Highlighting this year's program was a weekend at Makaha on April 25-26 on "The Family."

RECOMMENDATIONS: Programs for this committee for the 1970-1971 year should include the following: (1) Continued work with HMSA regarding fees for paramedical personnel as well as nonpsychiatric physicians engaged in treating the mentally ill person. (2) Continuing education of nonpsychiatric physicians and others in mental health should be led by members of this committee. (3) Cooperation by this committee with all other committees in the HMA as well as appropriate community agencies on matters pertaining to mental health.

KWONG YEN LUM, M.D.

Mental Health

Your Reference Committee next discussed the report of the Mental Health Committee. It recommends that the first recommendation be deleted. We also recommend that the following be added to the end of the second recommendation: "... in coordination with the Medical Education Committee." We recommend that the third recommendation be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. A motion was made to amend the report of the reference committee to not delete recommendation number 1. In the discussion, it was pointed out that it should be the responsibility of the Negotiating Committee to negotiate fees with insurance carriers. The motion to include recommendation number 1 was defeated. The Chairman moved adoption of this portion of the report. It was adopted.

RADIATION

The Radiation Committee met on two occasions and discussed in great detail planning guidelines for the establishment for radiotherapy service in Hawaii as being prepared by the Health & Hospital Planning Council of Honolulu. The committee unanimously agreed on the need for the development of acceptable guidelines for the establishment and expansion of radiotherapy facilities in Hawaii. Some change or corrections in the basic data and method of statement of portions of the report were made. Mr. Knobel, Executive Director of the Health & Hospital Planning Council, accepted essentially all of these, and they have been incorporated into the preliminary draft. I would like to point out that this Council has brought its review and report on this subject to this and other medical committees for review before publication, contrary to that done by RMP. A report by this latter organization contains glaring errors which are being avoided in the Hospital Planning Council's report.

Our committee was asked to review a bill being prepared to license technologists dealing with radiation. Multiple arguments for and against such a procedure were evaluated in detail. The confusion, limitations, and difficulties arising over physicians' licensure requires that great care be taken before similar problems are created for the technologists. This whole question reflects on all other facets of licensure. Hence, it was referred to appropriate committees for review.

Qualified physicians have volunteered and been selected to present testimony in reference to various bills introduced in this Legislature related to the field of radiology. A great deal of material has been collected in reference to licensure of the practice of chiropractic, both to oppose their bill for licensure and to support our bill for restriction of those who may use diagnostic radiation.

No other specific problems arose over the year.

GEORGE W. HENRY, M.D.

Radiation

Your Reference Committee then considered the report from the Radiation Committee and commends the chairman for his long and arduous work in this area. His continued vigilance for the protection of the public in the use of radiation equipment only by those qualified to use it is exemplary.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AD HOC COMMITTEE ON DRUG ABUSE

The Ad Hoc Committee has met 14 times since the last annual meeting. One of the first actions was to survey the members of the HMA on their experience in drug abuse and their needs and desires for continuing education in this area. 50.7% of the membership responded and 36% reported that they had had drug abuse problems in the past 90 days in their own practice. Another 35% of these problems involved alcohol, an entity not actively concerning this committee. 65% responded that they had drug problems other than alcohol, and 65% wished for more education in the area.

Accordingly, the HMA in conjunction with the American Social Health Association sponsored a drug abuse seminar for two days in January at the Ilikai Hotel, at which 49 physicians attended. As an outgrowth of this seminar, it was suggested that each community organize its resources and time to conduct community research, education and rehabilitation services. The chairman of this committee has personally visited two county societies to explain this concept.

Since there appeared to be so many agencies and bodies dealing in one way or another with the problem of drug abuse, the committee brought together representatives from as many such groups as were known in order to explore ways to coordinate and improve services. This meeting involved the state government and city agencies, the Honolulu Police Department, volunteer agencies, the professional societies, and two teenage high school students. The meeting was sufficiently beneficial to all so that a permanent community steering committee on drug abuse was formed. The Ad Hoc Committee of the HMA has continued to guide and chair this committee.

The Ad Hoc Committee formed the HMA position paper on drug abuse which was adopted by Council at its December meeting. Considerable time has been spent reviewing bills introduced into the State Legislature. Private action was taken on some but many were defective, deficient, or unacceptable in one way or another and the committee could not recommend their passage. One conference was held with certain legislative leaders which resulted in their requesting a closer consultative relationship with the medical profession on the drug abuse problem in the future.

Two areas of concern not adequately dealt with this year are the development of a competent pool of speakers for lay functions and the establishment of a drug analysis facility, both of which are being pursued at this time.

RECOMMENDATIONS: (1) That this committee be continued as an Ad Hoc Committee or as a standing committee of the HMA. (2) That the HMA continue its support and leadership to the community steering committee on drug abuse. (3) That this committee establish a continuing relationship with leaders of both houses of the State Legislature concerned with drug abuse in order to be more helpful and influential in future legislative matters.

JOHN R. STEPHENSON, M.D.

Ad Hoc Committee on Drug Abuse

Your Reference Committee next considered the report from the Ad Hoc Committee on Drug Abuse and

strongly endorses the first two recommendations. It further recommends amendment of the third recommendation to state "That a core committee of the Hawaii Medical Association, representatives from the State House and State Senate, and other selected interested agencies study legislation in drug abuse. This committee is to assume leadership in this area in accordance with recommendations from the State Legislature."

ACTION:

The Chairman moved the adoption of this portion of the report. A motion was made in regard to recommendation number 1 to read: That this committee be continued as an Ad Hoc Committee. The Chairman moved the adoption of this portion of the report as amended. It was adopted.

CANCER

The Cancer Committee engaged in the following activities during the past year:

At the request of the President, the Committee clarified the question as to who has access to the statistics from the Hawaii Tumor Registry. Statistical information will be available to the members of the Hawaii Medical Association, the American Cancer Society-Hawaii chapter, and the participating hospitals dependent on the availability of personnel and time. Names of patients and other personal information will not be available.

The committee endorsed in principle the interest of the American Cancer Society in establishing smoking withdrawal clinics in Honolulu provided they are supervised by physicians and conform to the guidelines of the American Medical Association. Assistance from the Cancer Committee was offered.

The committee had continued good working relationships with other agencies such as RMP, the Cancer Commission, and the American Cancer Society with periodic reports by the liaison members. A decision on the proposals to RMP from the Hawaii Tumor Registry and the Cooperative Chemotherapy Program is pending. Site visits were held on January 26, 1970.

The chairman participated in the editing of a detailed questionnaire being prepared by the Comprehensive Planning Committee of the American Cancer Society to be sent to patients and physicians for the purpose of surveying existing facilities for cancer management in the State.

The committee appointed a subcommittee to study the feasibility of establishing a cooperative cancer program in the State. The subcommittee concluded that such a program is feasible and desirable and recommended that initially the following be considered: (1) Establishment of a coordinated visiting professorship in Oncology among the various hospitals. (2) Establishment of coordinated periodic seminars rotating among different hospitals covering the various types of cancers so that all systems will be covered every two years or so. (3) Publicize the topics in Oncology when covered by visiting professors in surgery, gynecology and internal medicine. (4) Appointment of a subcommittee of the Cancer Committee to administer such a coordinated program.

The Cancer Commission report is being submitted separately. There is no budgetary request.

RECOMMENDATIONS: (1) That the committee carry out the recommendations from the subcommittee on the feasibility of a cooperative cancer program. (2) Continue the close liaison with the Cancer Commission, the American Cancer Society, and the Regional Medical Program. (3) Assist in the establishment and operation of Smoking Withdrawal Clinics.

The chairman of the committee would like to take this opportunity to officially thank the members of the committee and the secretaries for their interest and efforts.

THOMAS K. L. LAU, M.D.

Cancer Committee

The Reference Committee next considered the report of the Cancer Committee and accepted the first two recommendations. It recommends amendment of the third recommendation to read: "The committee supports the principle of Smoking Withdrawal Clinics." Also, the second sentence of the second paragraph on the Hawaii Tumor Registry should be amended to read: "Statistical information will be available to the members of the Hawaii Medical Association, the American Cancer Society-Hawaii Division, the participating hospitals, and such other agencies and individuals that have justifiable reasons for its use dependent on the availability of personnel and time."

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CANCER COMMISSION

During the past year, 10 meetings of the Cancer Commission were held. In addition, several meetings were held jointly with the Regional Medical Program group in connection with the revised application for an RMP grant to expand and strengthen the Hawaii Tumor Registry. The grant application was resubmitted and was forwarded to Washington at the end of July. As of this date word of its approval or disapproval has not been received.

At the invitation of the Cancer Commission, the Registry was visited by Mr. George Linden, supervisor of the California Tumor Registry. He made a number of helpful recommendations concerning the Hawaii Tumor Registry operation which can be put into effect when adequate funding is available.

In January 1970 an additional staff member for the Registry was employed for one year, to be paid from Cancer Commission funds accumulated from past American Cancer Society grants. Her primary duties are to assist in the hospitals wherever problem areas exist in their registries. Every effort is being made to bring case reporting to a current basis in all hospitals and to emphasize the obtaining of complete followup information.

GROVER H. BATTEN, M.D.

Cancer Commission

Your Reference Committee then considered the report of the Cancer Commission and accepts this important report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

DISASTER

The entire committee held one formal meeting during 1969-1970. The necessary work during the year was done by committee members on an individual basis. The Special Task Force appointed by Dr. Quisenberry of the Department of Health required considerable time for the numerous meetings and field trips that were made. The work of this committee was finally concluded in February, 1970.

The emergency disaster medical programs for this year were as follows: (1) Medical self-help, (2) PDH (Package Disaster Hospitals), and (3) Updating of the emergency medical stockpiling by the Special Task Force headed by the chairman.

The Medical Self-help Program, a comprehensive first-aid training program for disaster survival, is now in its eighth year in Hawaii. Since records were first installed in March, 1963, the Medical Self-help Program has through March, 1970, produced 50,814 graduates resulting from the 1,260 courses conducted.

One major disaster exercise was held on Oahu dur-

ing the calendar year 1969. The exercise, "Metropolitan 924," was held on Oahu at Radford High School and involved 350 casualties, 75 of which were litter cases. This exercise was conducted on September 24, 1969. There is no record of any disaster medical exercise in any of the neighbor islands during this year.

We now have nineteen PDH's. Sixteen are federally owned, two are federally-owned training hospitals, and one is a state-owned hospital. Eleven of these are on Oahu, one on Kauai, two on Maui, and five on Hawaii.

The Special Task Force program evaluated the entire medical stockpile for Hawaii and transmitted its findings to Dr. Quisenberry in February, 1970.

RECOMMENDATION: (1) That all county hospitals update their disaster plans and medical manpower at least annually, and (2) That county societies on neighbor islands hold at least one disaster drill in major hospitals at least once a year.

CASIMER JASINSKI, M.D.

Disaster Committee

Your Reference Committee then discussed the report of the Disaster Committee. It wishes to correct the last sentence of the fourth paragraph which gives the impression that no disaster exercises were held on the neighbor islands. The committee is aware of one exercise on Maui, and two on Hawaii this year. It accepts the recommendations except to delete the words "on neighbor islands" from the second recommendation.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WATER SAFETY

Although the committee has not been active this year, this does not mean that there is no need for it.

There are still too many drownings, more sharks are seen in our waters, and water pollution is becoming more of a health problem.

RECOMMENDATION: That the next committee study and support the already active bodies in implementing drown-proofing, shark control, and water pollution.

ROGER B. BRAULT, M.D.

Water Safety

Your Reference Committee then considered the Water Safety Committee report and recommends a more active committee be appointed to study this neglected area.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON PUBLIC HEALTH

The Commission on Public Health consists of the following committees: Automotive Safety, Cancer, Chronic Illness and Aging, Communicable Disease and Immunization, Crippled Children, Diabetes, Heart, Maternal and Perinatal Mortality Study, Mental Health, Radiation, School Health, Water Safety, the Ad Hoc Drug Abuse Committee, and the newly created Environmental Health. The reports of the various committees give a good indication of the active participation of the membership in the areas of public health. Because the committee meetings are the sounding board or "voice" of the physicians, the committee members should be congratulated on some of the active planning, programs, and decisions made this past year in improving the quality of medicine in Hawaii. The chairmen and vice-chairmen of each committee have offered much stimulation and initiative in these developments.

It is imperative that we continue to "keep abreast with the times." The various committees should be maintained and continued strong medical leadership offered

to the community in public health affairs.

CALVIN C. J. SIA, M.D.

Report of the Commission on Public Health

The Reference Committee next considered the report of the Commission on Public Health, concurred in its summary, and noted that the commissioner does not recommend any changes in the structure of the commission.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

Resolution No. 1

The Reference Committee next considered this resolution and endorsed its concept. The committee, however, revised the resolution to state that the School Health Committee is the designated authority and they will draw up a set of guidelines for reportable injuries as designated in the fourth resolve.

ACTION:

The Chairman recommended that this resolution be adopted. For further clarification, it was noted that the fourth resolve should read: That the Athletic Medicine Units be required to submit complete reports on all injuries to a designated authority which shall be the School Health Committee and that a set of guidelines be adopted by this committee to determine which injuries are reportable. It was voted to adopt the resolution as recommended.

RESOLUTION NO. 1 AS ADOPTED

Re: Athletic Medicine Units.

WHEREAS, The American Medical Association at its 1969 House of Delegates adopted a resolution to assure an athletic medicine unit for every high school in the United States; and

WHEREAS, The Hawaii Medical Association and the American Medical Association have demonstrated an active concern in athletics insofar as health problems arise frequently and that this concern is reflected in the recognition of the field of "Sports Medicine"; and

WHEREAS, The high rate of injury, the need for prevention of these injuries and the need for rehabilitation of the injured athlete constitute a serious public health problem; and

WHEREAS, Complete records of athletic injuries are non-existent in many schools; and

WHEREAS, The medico-legal aspects of athletic medicine are becoming more and more important; therefore be it

Resolved, That the Department of Education and the Department of Health of Hawaii be urged to encourage an adequate Athletic Medicine Unit in every school that mounts a sports program; and be it further

Resolved, That the Athletic Medicine Unit be composed of a duly licensed physician, and athletic health coordinator (trainer) and other necessary personnel; and be it further

Resolved, That the duties of the Athletic Medicine Unit be the prevention of injury, the provision of medical care with the cooperation of the family physician and others of the health care team of the community and the rehabilitation of the injured; and be it further

Resolved, That the Athletic Medicine Units be required to submit complete reports on all injuries to a designated authority which shall be the School Health Committee and that a set of guidelines be adopted by this committee to determine which injuries are reportable, and be it further

Resolved, That medical schools be urged to cooperate in establishing programs of education for educating ath-

letic health coordinators (trainers) as well as specialists in Athletic Medicine; and be it further

Resolved, That copies of this resolution be forwarded to the Governor, the Legislature, the State High School Athletic Association, the Department of Health, the Department of Education, the Board of Education, and the Association of School Administrators, or the equivalent.

Submitted by the SCHOOL HEALTH COMMITTEE

ACTION:

The Chairman moved adoption of this report as a whole as amended. It was adopted.

PARLIAMENTARY AFFAIRS REFERENCE COMMITTEE

Mr. President and Members of the House of Delegates:

Your Reference Committee met before an audience of approximately fifteen physicians and gave careful consideration to the matters referred to it. The committee is pleased to make the following report:

BUREAU OF RESEARCH AND PLANNING

During the past year the Bureau has attempted to meet the challenge of keeping "abreast of the times" and maintaining close contact with all areas of health care delivery. As an initial step, the chairman reorganized the Bureau into smaller task forces with responsibility for maintaining close liaison with all activities in specific health-related areas. These included programs such as Comprehensive Health Planning and the Regional Medical Program; continuing projects such as the Health Services Research Center and the Health and Community Service Council; and special projects including HMA reorganization, a study of computers in medicine; and a major study of the quality of personal medical care in Hawaii.

The latter project has been a special concern of the Bureau along with the HMA Council throughout the year. It is the direct result of a preliminary study by Dr. Paul Sanazaro of the quality of health care in hospitals in Hawaii, and his recommendation that a definitive study of physicians' services both in offices and in hospitals be done. The Council recommended that such a study be undertaken as a basis for improving the quality of care and for planning continuing education programs for our professional community. In pursuing this recommendation, the Bureau contacted Dr. Sanazaro, and, on his advice, asked for a preliminary meeting with Dr. Beverly C. Payne of the University of Michigan, an experienced physician and investigator in the area of health care appraisal. Dr. Payne visited Honolulu and met with the Council, the Bureau, and other interested groups in September. Following this, he submitted a Proposal for Personal Medical Care Evaluation in Hawaii which was distributed to the entire HMA membership on the recommendation of the Bureau. Dr. Mamiya will outline the further steps in developing the Payne study including the formation of his Advisory Group. At the time of this writing the study is in progress, with active participation of many Association members. Many community agencies and organizations have expressed enthusiastic support for this project. With the participation of the entire medical community of Hawaii this has become a pioneering endeavor, the first statewide investigation of health care quality in the country.

In other areas, the Bureau participated in planning the several conferences on socio-economic aspects of health care held in the past year, prepared a report on computer applications in medicine (with emphasis on the pros and cons of multiphasic screening via electronic data processing), and recommended that the HMA take an active role in coordinating the several community health facility planning programs toward more optimal planning, responsive to the needs of the community. In addition, the Bureau contacted each of our Washington Senate

and Congressional representatives indicating willingness to assist in screening requests for Federal research funds.

RECOMMENDATIONS: (1) At this time, while the study by Dr. Payne is being completed, plans should be formulated for continuing study of health care in our community on an ongoing basis, with coordination of this endeavor with those involved in postgraduate medical education and health manpower. (2) Further efforts should be made to keep the Bureau, and thereby the HMA, abreast of the times by working toward close liaison with all groups and activities in health care planning and delivery. (3) More effort should be made by Bureau members to initiate innovative ideas toward improving the role of the medical community in relation to the expanding social and economic needs of the total Hawaii community.

JOSEPH OREN, M.D.

Bureau of Research and Planning

Your Reference Committee first considered the report of the Bureau of Research and Planning. The committee recommends approval of all the committee's recommendations.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

BYLAWS & PARLIAMENTARY

The committee proposes the following revisions, additions, and rephrasing in the Bylaws. Deletions are noted by ----- and additions are in CAPS.

CHAPTER II

Section 1. Every ----- PHYSICIAN LICENSED TO PRACTICE IN THE STATE OF HAWAII, INTERN OR RESIDENT IN AN ACCREDITED TEACHING HOSPITAL, AND FULL-TIME STUDENT AT THE UNIVERSITY OF HAWAII'S SCHOOL OF MEDICINE, who is a member in good standing of a component society of this Association, shall be a member of this Association and the American Medical Association, either as an active, inactive, or service member. **MEMBERSHIP IN THE HAWAII MEDICAL ASSOCIATION OR IN ANY OF ITS COMPONENT SOCIETIES SHALL NOT BE DENIED OR ABRIDGED ON ACCOUNT OF COLOR, CREED, RACE, RELIGION, OR ETHNIC ORIGIN.**

Section 8. (c) **ANY MEMBER WHO IS DELINQUENT IN PAYMENT OF DUES OR ASSESSMENTS OR WHO IS NOT A MEMBER IN GOOD STANDING IN HIS COUNTY MEDICAL SOCIETY SHALL BE REMOVED FROM ANY ELECTED OR APPOINTED COMMITTEE OR OFFICE.**

CHAPTER III

Section 4. **THE NUMBER OF ACTIVE MEMBERS ON A COUNTY SOCIETY'S ROSTER AS OF DECEMBER 31 OF EACH YEAR SHALL DETERMINE THE NUMBER OF DELEGATES THAT SOCIETY IS ENTITLED TO FOR THE FOLLOWING CALENDAR YEAR.**

Section 5 (d) (14). **IN THE EVENT OF THE DEATH, RESIGNATION, OR REMOVAL OF THE EXECUTIVE DIRECTOR, THE ELECTED SECRETARY SHALL ASSUME THE DUTIES OF THAT OFFICE UNTIL THE VACANCY IS FILLED.**

Section 5 (e). **EXECUTIVE DIRECTOR: THE EXECUTIVE DIRECTOR, FORMERLY DESIGNATED AS THE EXECUTIVE SECRETARY, IS EMPLOYED BY THE COUNCIL AND NEED NOT BE A PHYSICIAN OR MEMBER OF THE ASSOCIATION. THE EXECUTIVE DIRECTOR SHALL PERFORM THE DUTIES USUAL TO SUCH AN OFFICE AND TO THE OFFICE OF SECRETARY EXCEPT SUCH AS ARE IMPOSED UPON THE ELECTED SECRETARY**

BY THE CONSTITUTION AND BYLAWS, SUBJECT TO ADVICES OF THE HOUSE OF DELEGATES AND THE COUNCIL, THE EXECUTIVE DIRECTOR SHALL ACT AS GENERAL ADMINISTRATIVE OFFICE AND BUSINESS MANAGER OF THE ASSOCIATION. THE DIRECTOR SHALL REFER TO THE ELECTED SECRETARY SUCH ADMINISTRATIVE QUESTIONS AS ARE OUTSIDE THE FIELD OF ONE NOT HOLDING THE DEGREE OF DOCTOR OF MEDICINE. THE EXECUTIVE DIRECTOR SHALL, WITH THE APPROVAL OF THE OFFICERS, EMPLOY AND DISMISS SUCH EXECUTIVE, ADMINISTRATIVE, AND CLERICAL ASSISTANTS AS HE DEEMS BEST TO ACCOMPLISH THE EFFICIENT CONDUCT OF HIS OFFICE, WITHIN SUCH BUDGETS AND SALARY SCALES AS THE HOUSE OF DELEGATES AND THE COUNCIL MAY APPROVE, AND ASSIGN TO THEM SUCH OF THE DUTIES IMPOSED UPON HIM AS HE MAY DEEM APPROPRIATE. HIS SALARY SHALL BE FIXED BY THE COUNCIL. HE SHALL BE UNDER THE DIRECT JURISDICTION AND SUPERVISION OF THE PRESIDENT. HE SHALL ATTEND THE MEETINGS OF THE HOUSE OF DELEGATES AND OF THE COUNCIL AND AS MANY OF THE COMMITTEE AND COMMISSION MEETINGS AS POSSIBLE, AND SHALL KEEP SEPARATELY THE REPORTS OF THEIR RESPECTIVE PROCEEDINGS. HE SHALL AT ALL TIMES HOLD HIMSELF IN READINESS TO ADVISE AND AID, SO FAR AS IS POSSIBLE AND PRACTICABLE, ALL OFFICERS AND COMMITTEES AND COMMISSIONS OF THIS ASSOCIATION IN THE PERFORMANCE OF THEIR DUTIES AND IN THE FURTHERANCE OF THE PURPOSES OF THIS ASSOCIATION.

CHAPTER IV

Section 1 (a) (6). The House of Delegates shall consist of . . . , etc. AND ALL LIVING PAST PRESIDENTS OF THE ASSOCIATION WHO ARE MEMBERS IN GOOD STANDING.

CHAPTER V

Section 1 (d). The Council shall have the power and ----- RESPONSIBILITY TO EMPLOY OR REMOVE, OR SUSPEND, AND FIX THE COMPENSATION OF, THE EXECUTIVE DIRECTOR.

Section 1 (e). ----- the Treasurer, AND THE ASSOCIATION'S DELEGATE(S) AND ALTERNATE DELEGATE(S) TO THE AMERICAN MEDICAL ASSOCIATION.

Section 3. Functions. (a) The Council shall serve as the executive body of the Association between sessions of the House of Delegates, as the Board of Censors of the Association, and as the ----- REVIEW BODY FOR THE FINANCE COMMITTEE. . . . (f) As the ----- REVIEW BODY OF THE FINANCE COMMITTEE it shall order an annual audit of the accounts of the Treasurer and other agent of the Association and present a statement of same, together with a budget for the coming year, in its annual report made by the Treasurer to the House of Delegates. All monies received by the Council and its agents, resulting from the discharge of duties assigned to them, must be paid to the Treasurer. THE COUNCIL SHALL REVIEW AT EACH OF ITS MEETINGS THE INCOME AND EXPENSE OF THE ASSOCIATION AND SHALL HAVE AUTHORITY TO APPROVE EXPENDITURES NOT APPROVED BY THE HOUSE OF DELEGATES TO THE EXTENT NOT TO EXCEED FIVE PER CENT OF ANY SPECIFICALLY BUDGETED ACCOUNT OR FIVE HUNDRED DOLLARS FOR AN ACCOUNT NOT SPECIFICALLY INCLUDED IN THE BUDGET.

CHAPTER VI

Section 5 (b). No member shall take part in any of

the proceedings of the Annual Session IF HE IS DELINQUENT IN HIS DUES OR ASSESSMENTS OR IF HE IS NOT IN GOOD STANDING IN HIS COUNTY MEDICAL SOCIETY, AND until he has complied with the provisions of this section.

CHAPTER XI

Section 1. The deliberations of the Association shall be governed by parliamentary usage as contained in ----- STURGIS REVISED STANDARD CODE OF PARLIAMENTARY PROCEDURE, when not in conflict with the Charter and Bylaws.

The Bylaws & Parliamentary Committee considered the change of incumbence in the offices of the AMA Delegate and Alternate Delegate and concluded that in 1969 the Alternate Delegate, Dr. Mills, had served as acting AMA Delegate. The terms of the present incumbents in these offices, Dr. George H. Mills and Dr. Theodore T. Tomita, expire December 31, 1971.

Dr. Mills's recommendation that a small number of commissions replace a large number of committees has not been acted upon by your committee because it decided it required extensive discussion in the House of Delegates, perhaps in a special session, before such changes should take place. In view of such a possibility, no changes in Chapter VIII are being recommended at this time, notwithstanding Council action forming new committees on Environmental Health, Health Manpower, and Peer Review. The HMA Bylaws permit the President to appoint any committees he wishes even though they are not designated in the Bylaws (Chapter VIII, Section 2, Paragraph 3).

RECOMMENDATIONS: (1) That the Bylaws be renumbered in decimal style for easier reading and reference. (2) That the rephrasing, revisions, and additions of the respective designated sections of the Bylaws be accepted.

HARRY L. ARNOLD, JR., M.D.

Bylaws and Parliamentary

Your Reference Committee studied in detail the revisions of the Bylaws as proposed by the Bylaws and Parliamentary Committee. We recommend approval of these proposals as circulated except that the following sections shall be changed to read as set forth below:

Chapter II, Section 8—Reletter (c) to become (d) and (d) to become (e). Add new section (c) as follows: Any member who is delinquent in payment of dues or assessments or who is not a member in good standing in his county medical society shall be removed from any elected or appointed committee or office.

Chapter III, Section 5 (e), Executive Director—He shall be under the direct jurisdiction and supervision of the President. (The change was made from the word "Council" to "President" to facilitate and expedite the business of the Association. The President is ultimately responsible to the Council.)

Chapter V, Section 3 (f)—The Council shall review at each of its meetings the income and expense of the Association and shall have authority to approve expenditures not approved by the House of Delegates to the extent not to exceed \$3,000. (It was felt that the original \$500.00 limitation is unrealistic.)

Your committee recommends the approval of Recommendations No. 1 and No. 2 as amended above.

ACTION:

The Chairman moved adoption of this portion of the report. There was considerable discussion regarding Chapter V, Section 3 (f) and the House asked the Reference Committee to clearly define this section. The Reference Committee recommended that Chapter V, Section 3 (f) read as follows: The Council shall review at each of its meetings the income and expense of the Association. It shall have the authority to approve expenditures not budgeted by the House of Dele-

gates to the extent not to exceed \$3,000 for any one item nor a total of \$5,000 in any fiscal year. The Chairman moved adoption of this portion of the report as amended. It was adopted.

LEGISLATIVE

In July of 1969, the President, George H. Mills, M.D., in a letter to the Chairman, urged that the committee start its work as early as possible. The committee met in August and set as its first task the mandates of the House of Delegates.

On Medical Practice Act Revisions, a number of meetings were held with the Board of Medical Examiners, the Medical Practice Act Committee, the Health Manpower Committee of Comprehensive Health Planning, representatives of the Hospital Association, and Nurses Association. The Medical Society's position was to retain the one year residency requirement because the majority of the membership asked for retention of this requirement, support the amendment to allow physicians a limited and temporary license while under the employment of a government agency and they may provide direct patient care except when they are providing care to private patients for a fee; and supported the endorsement provisions after completion of the Federation of Licensing Examination Boards (FLEX). The Legislature is in its 57th day as this report is being written and the outlook for passage of both bills is favorable.

The second mandate was the endorsement of the Maui County Medical Society position on Act 97. A number of meetings were held on this subject, with invitations to all county medical societies; to a Joint Commission on Accreditation of Hospitals (JCAH) representative, the Hawaii Hospital Association, the Department of Health, and others. The Legislative Committee supported a proposal introduced by Maui County Medical Society. As of this date, the measure has passed three readings in the Senate and two readings in the House.

The committee early in its deliberations approved job specifications for the legislative counsel and the legislative secretary. Mr. Clesson Chikasuye was elected to serve as Legislative Counsel.

The committee held two special meetings with individual legislators. They included one with Rep. George Loo and another with Senator James Clark, Senator Vincent Yano and Rep. George Loo. The latter meeting was sponsored by the Ad Hoc Committee on Drug Abuse.

A major accomplishment of the legislative program of the Hawaii Medical Association were changes in the abortion law. Credit was given to Dr. George Goto for this achievement.

Dr. Elmer Johnson headed a task force on malpractice insurance. He was assisted by the Legislative Counsel in drafting two proposed measures which were referred to the Honolulu County Committee studying this subject.

Dr. John Stephenson chaired the Ad Hoc Committee on Drug Abuse. A number of physicians are actively participating in this community problem. It was decided that the Association take leadership on this subject in the coming year and give support to additional funds and positions to existing agencies in order that more can be done with this serious health problem. We were urged by Senator Vincent Yano that the Hawaii Medical Association take a more active role on the revisions of the Hawaii Penal Code dealing with narcotics.

The HMA introduced a measure on professional immunity bill (Peer Review Bill). The outcome of this measure is not known at this time, however, the bill has passed three readings in the Senate and two readings in the House.

The HMA also introduced a measure on birth control and medical services to certain minors. This bill is not expected to pass this session.

On environmental health, the committee invited the

representatives of the Department of Health to discuss some of the measures. The committee supported those measures that had a definite and related interest.

Dr. Theodore Tomita introduced on behalf of the HMA a proposal to provide for the usual, customary, and reasonable fee concept. This measure was not acted upon since it was thought the desired changes in the Workmen's Compensation law could be handled administratively. A bill to include chiropractors to receive Workmen's Compensation payment (HB 449) was opposed vigorously.

The HMA, through Dr. George Goto, continued to support a statewide medical examiner system and spoke against a proposed county operated system.

There were other measures that the Association supported and individual physicians participated. They included amendments to the practice of optometry which the specialists of the Society participated; rural physicians; family planning clinics; pilot program to provide health services at public schools; children with learning disabilities; children's rights; rubella vaccination; renal dialysis; and residential change centers. Measures in which the HMA did not support were on hospital franchising; physician's assistants (as introduced); and insurance payments to include chiropractors.

BUDGET REQUEST:

Legislative Counsel	\$6,000.00
Dinner and entertainment.....	1,000.00
Today's Health	150.00
Miscellaneous	100.00
	<hr/>
	\$7,250.00

RECOMMENDATIONS: (1) That Mrs. Becky Kendro continue to serve as the Legislative Secretary of the Hawaii Medical Association. She rendered yeoman service and carried on most effectively. Her legislative responsibilities should be given first priority and more time assigned to these duties as needed. (2) A luncheon, dinner or entertainment program was not carried out during the year because of pressure of time and so no funds were utilized; however, the Legislative Committee recommends that \$1,000.00 be budgeted because this will be an election year and funds could be properly and adequately used for meetings with potential or elected candidates. (3) That the money for the Legislative Counsel be continued. The committee may wish to consider using the funds on a mixed contract and/or fee for service basis. (4) That the HMA through its members and various committees participate actively and give leadership to comprehensive efforts in the problem of drug abuse. (5) That individual physicians of the Association who have interests in legislative and community efforts to protect our environment should participate in activities going on in our State. (6) That HMA through suitable committees study the proposed legislation of physician's assistants and other allied health personnel and be prepared to recommend the Association's position in this important matter. (7) That the leadership of the Association continue to urge individual and group participation of its members in legislative affairs. A good start has been made and a number of physicians have made excellent contributions at legislative hearings. They also developed good relationships with the legislators and have become recognized by community groups for their expertise.

RICHARD K. C. LEE, M.D.

Legislative

Your Reference Committee next considered the report of the Legislative Committee. A full and complete discussion was held. Your committee recommends approval of the budget request of \$7,250.00. Your committee recommends that Recommendation No. 1 be changed to read as follows: The Executive Director should appoint a legislative secretary of the Hawaii Medical Association

whose legislative responsibilities should be given first priority. Mrs. Becky Kendro has rendered yeoman service and carried on most effectively. Your committee recommends approval of Recommendation Nos. 2, 3, 4, 5, 6, and 7.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON LEGISLATION

The Commission on Legislation consisting of the Legislative, National Legislation, Medical Practice Act and Pharmacy Committees reviewed pertinent and proposed legislation and activities falling within the functions of each of the committees. The deliberations and actions taken by the committees are summarized in the reports of each committee.

The national legislative scene is so complex that no one in full time practice of medicine can do a detailed continuing study of all medical legislation in the Congress of the United States. With the help of the Council on Legislative Activities of the American Medical Association, however, some direction for action can be obtained which makes this task slightly less difficult.

The overriding concern of the Fifth Session 1970 of the Hawaii State Legislature was the issue of abortion reform until March 11, 1970, when the archaic law of 1869 was repealed. Subsequently the Legislature considered other bills affecting the medical profession. Since the Legislature was still in session as the report of the Legislative Committee was being prepared, the outcome of these pertinent bills affecting the medical profession is not known. The time and effort put forth by the members of the Association in the area of legislation is reflected in the enactment of bills favored by the medical profession or in the modification or tabling of bills that do not meet with the approval of the medical profession.

GEORGE GOTO, M.D.

Commission on Legislation

Your committee next considered the report of the Commission on Legislation and recommends that the report be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICAL PRACTICE ACT

The Medical Practice Act Committee met on numerous occasions and came to the conclusion that the one year residence clause should be retained. The committee felt that if the residence clause is to be repealed then there should be no T&L licenses and that the Board of Medical Examiners should give the State Board Exams four times a year instead of the present method of giving the exams only twice a year.

The committee was in unanimous agreement that those physicians who are working for the Federal, State or City & County Government should be exempt from examinations, provided that they are in continuous employment of the Federal, State, or City & County Government. However, once they go into private practice they must be properly licensed.

We met with the members of the Board of Examiners and they were more in favor of reciprocity especially with those States giving the same FLEX exam. There are about 21 States using this same exam. Some of the members of the committee felt that Hawaii had recognized the National Board but because FLEX was relatively new, further studies should be carried out before any recommendation is made. The members of the Board of Medical Examiners were dubious that this Legislature will repeal the one-year residence clause. However, the

Board of Medical Examiners recommended that we poll our doctors and subsequently a poll was conducted; the result was 4 to 3 in favor of retaining the one year residence clause. We also met with the Manpower Committee of Comprehensive Health Planning. They were in complete agreement that the ratio of physicians to the population was adequate but the problem throughout the whole Country was maldistribution of doctors. They also felt that to require foreign-graduates to take an extra three years of American training was discriminatory but the Legislative Committee, Board of Medical Examiners and Medical Practice Act Committee felt that this portion of the requirement should be retained and we testified in the Legislature as such.

The Board of Medical Examiners wanted this committee to study the possibility of osteopaths being given hospital privileges before we recommend changes in the Medical Practice Act that they too take the same examination as the medical doctors.

We wrote to AMA asking if the AMA recognized the National Board of Osteopaths as equivalent to our National Board and at present such is not the case. However, we decided to pursue this method further in depth before making any recommendations.

Just how the Legislature will amend the present Medical Practice Act is unpredictable at this time.

RECOMMENDATIONS: (1) That this Medical Practice Act Committee should be handled by the Legislative Committee. (2) That a continued search in conjunction with the Board of Medical Examiners be carried out throughout the year concerning osteopaths so proper recommendations could be made to the Legislature in the next session.

THEODORE T. TOMITA, M.D.

Medical Practice Act

Your Reference Committee next considered the report of the Medical Practice Act Committee. Your committee recommends approval of Recommendation No. 1 and further recommends that Recommendation No. 2 be changed to read: That a continuing study and evaluation in conjunction with the Board of Medical Examiners be carried out regarding osteopathy and the medical practice act.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

NATIONAL LEGISLATION

Thousands of bills of medical or health orientation were introduced in the 91st Congress. Chances are very slim for any action soon on major health legislation pending before Congress because of growing legislative traffic jams and battle over tax legislation.

The committee considered and took action on the following bills:

(1) Wrote to our representatives in Congress and called their attention to HEW's report which recommended that chiropractic services not be included under the Medicare program.

(2) Concurred with AMA's position to expand existing facilities on science rather than establishing new ones, like Armed Services Academy type of medical school (HR 1).

(3) Supported the proposal (HR 173) to amend the definition of a corporation in the Internal Revenue Service code to provide that it includes professional corporations and associations formed under the laws of the state.

(4) Recommended to support in principle the concept of national health insurance (HR 9835 and S 2705), particularly that sponsored by the AMA or "Medicredit."

(5) Opposed Senator Long's amendment to the Omnibus Tax Bill (HR 13270) to deny professional corporations the retirement benefits enjoyed by corporations of nonprofessionals.

RECOMMENDATIONS: (1) The Association should keep close tab on the AMA's proposal on tax credits for the

purchase of health insurance and other health insurance benefit plans now in Congress; allied health profession proposals; and the proposal to impose Federal control on Workmen's Compensation. (2) There should be continuing examination and evaluation of the myriads of bills introduced in Congress pertaining to drug use and drug abuse. (3) The best way for the members of the Association to follow and be kept informed on Federal legislation is to scan the feature, "Status of Medical Legislation" which appears regularly in the *American Medical News* (formerly *AMA News*). Any comments and reactions should be relayed to this committee. Universal participation of the members is of the utmost importance so that the load of involvement may be shared amongst us. (4) More involvement of the HMA members in whatever capacity in the activities of CHP, RMP, and other governmental agencies involved in health planning and policy making. This is especially important to organized medicine in view of President Nixon's statement on July 10, 1969, that the country is faced with "massive crises" in the distribution of medical care, and announced a program of action to keep medical care costs down. (5) This committee should continue to develop a strong liaison with Hawaii's representatives of Congress and members of their staff in order to keep themselves as informed as possible of our activities and opinions. (6) In view of the rapidly changing conditions in American medicine today, members of the Association should assume leadership and a larger role in formulating national health policies.

CESAR B. DEJESUS, M.D.

National Legislation

Your committee next considered the report of the National Legislative Committee. Your committee recommends approval of the committee's recommendations.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AD HOC SEARCH

The committee did not find it necessary to meet during the year. As a result of the last House of Delegates mandate that a management consultant be retained to study the Hawaii Medical Association's organizational structure, the firm of Peat, Marwick, Mitchell & Company was employed and an extensive report was obtained from them on December 24, 1969. Their report was submitted to the HMA Council and the Council asked that a Personnel Team be established to review the report and make pertinent recommendations to the Council. This was carried out and reported to the Council and their recommendations were approved. The Peat, Marwick, Mitchell report was approved in total by the Council.

RECOMMENDATIONS: (1) That an ad hoc committee be established to be involved in the reorganizational structure of the HMA and the implementation of the Peat, Marwick, Mitchell & Company report. (2) That the Ad Hoc Search Committee be dissolved.

WILLIAM E. IACONETTI, M.D.

Ad Hoc Search

Your Reference Committee next considered the report of the Ad Hoc Search Committee. A full and complete discussion was had. The committee felt that the original instructions given to the Ad Hoc Search Committee were somewhat obscure and that it would probably be best to allow the committee to be dissolved rather than adding new assignments at this time. Your committee recommends approval of all the committee's recommendations.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PRESIDENT'S REPORT

Serving as your president during the past year has been an exciting challenge. My goals for the year were few and simple: (1) Operate the Hawaii Medical Association in a business-like fashion, (2) Initiate the necessary changes to increase the efficiency of operation and manpower utilization to better serve the membership. (3) Open our tightly closed doors to our auxiliary, the media, and the community to develop better communication, participation, and understanding between organized medicine and society.

Some of this was accomplished in the past year, but we have only scratched the surface. There is much work to be done in this Association to reach the optimum level of integration into the Hawaiian community. The destiny of the Hawaii Medical Association and how well we serve the citizens of this state depend on how realistic we are in accepting the challenge and making changes. We cannot run our Association on programs and ideas developed 20-30 years ago. This is a new ball game.

I would like to recommend for serious consideration by the House of Delegates the following:

RECOMMENDATIONS: (1) Activate the Ad Hoc Search Committee to: (a) develop immediate and long-range goals and objectives for Hawaii Medical Association, some of which could become HMA policy; (b) clearly define the roles of the county societies, HMA, and AMA and how they integrate and compliment each other; (c) study in depth the concept of multiphasic screening of the apparently well patient, the use of electronic data processing in this program, and exploration of existing programs and recommend to the Council within six months how this system can be used by all physicians of this Association. (2) Complete the implementation of the recommendations presented in the operational analysis done by Peat, Marwick and Mitchell: (a) develop realistic and acceptable mechanisms to merge the administrative functions of the Hawaii Medical Association and all county societies; (b) budget adequate monies for an interim evaluation of HMA operation in 1972. (3) The Ad Hoc Committee on Drug Abuse and Medical Education Committee should develop a positive continuing education program on this subject for all physicians in Hawaii. Also they must work closely with all agencies, private and governmental, to develop an action oriented drug education program for Hawaii. (4) Develop with all county societies clear outlines for peer review. Assist all county societies in adopting and implementing their program. (5) Continue to budget an amount equal to the salary of the legislative counsel to be used for a counsel and/or other legislative activities prepared by the Legislative Committee and Commission. The budgeted dollars to be sent with Council approval. (a) The secretary to the Legislative Committee be totally free from October through the end of the next legislative session to increase the efficiency of our legislative program. The exact time involved should be left to the discretion of the chairman of the Legislation Commission, the president, and executive director. (6) Budget adequate funds so that an officer or qualified staff member of HMA can meet with the neighbor island county medical societies as needed. The county societies can request their choice of individual and time. (7) Develop amendments to the constitution and bylaws that will allow medical students, interns, and residents to join the HMA. Realistic dues modification and scope of participation in the total HMA process should be clearly defined. (8) The president of the Woman's Auxiliary of HMA become a permanent exofficio member of the Council. (9) Abolish the committee system of the HMA and establish a total commission system of nine members—who are elected by the House of Delegates and serve for three-year staggered terms. Each commission to nominate their own chairman for council approval. (10) Modification of the present system of

developing the HMA budget so that: (a) the Publication Committee will annually develop the budget for all HMA publications; (b) the Committee responsible for the annual meeting develop a budget. These budgets along with all other budgeted items will be submitted for early study by the Finance Committee before presentation to the Council and ultimately the House of Delegates for approval; (c) the Personnel Team in conjunction with the Finance Committee establish an equitable projected salary scale for all employers.

I would like to thank the staff of HMA for showing exemplary loyalty and great ability in responding to a crisis and adapting to change. I extend to them my sincere Mahalo.

I would also like to thank the officers, councilors, commissioners, committee chairmen, and members for their unselfish contributions to the operation of HMA.

GEORGE H. MILLS, M.D.

President's Report

Your Reference Committee next considered the report of the President. Your committee recommends that Recommendation No. 1 (a) be changed to read: That the President appoint an Ad Hoc Committee to (a) develop immediate and long-range goals and objectives for the Hawaii Medical Association, some of which could become HMA policy, including the feasibility of establishing a total commission system to replace the present committee system; Your committee recommends that Recommendation No. 9 be deleted. Your committee recommends approval of Recommendations Nos. 2, 3, 4, 5, 6, 7, 8, and 10. The last word in Recommendation No. 10 should be changed to read "employees."

ACTION:

The Chairman moved adoption of this portion of the report. A motion was made to change recommendation number 8 to read: The President of the Woman's Auxiliary of HMA become a permanent nonvoting ex officio member of the Council. The Chairman moved adoption of this portion of the report as amended. It was adopted.

SECRETARY'S REPORT

The total active membership of the Association as of December 31, 1969, was 796, an increase of 28 over December 31, 1968, 17 of which were reported by neighbor island societies. The 1968 increase was 7, in 1967 it was 18, in 1966 it was 25, in 1965 it was 41, in 1964 it was 17, and in 1963 it was 37. The inactive members, reported only through Honolulu County, numbered 21, ten more than the previous year. This increase was due, no doubt, to the County's revised Bylaws which permit physicians who are not in the private practice of medicine to qualify for inactive status. Of the 796 active members, 70 were granted dues waiver, an increase of one over the previous calendar year.

The total number of unlimited licenses issued to physicians to practice medicine in Hawaii as of December 31, 1969, was 1,532, an increase of 93. The preceding years this increase amounted to 63 in 1968, 71 in 1967, 112 in 1966, 53 in 1965, 34 in 1964, and 62 in 1963. There were 500 physicians licensed to practice in Hawaii who did not reside in the State, an increase of 34 over the previous year.

The first temporary and limited licenses were issued July 2, 1965. These licenses are valid for 18 months only, except that interns and residents are required to renew annually. As this report is being written, there are a number of bills before the legislature which would change the Medical Practice Act. One of these would permit physicians in government employ to renew their temporary and limited licenses indefinitely. In the calendar year 1966 a total of 120 T&L licenses were issued. In 1967 the total number decreased to 117, and then

went up to 129 in 1968. The total for 1969 was 98, broken down as follows:

Under the direction of.....	35
Resident or Intern.....	46
Government	12
Emergency	4
Shortage	1

Eight members died in 1969: Harrison Paynter, Shosei Yamanoha, Hoei Higa, Rudolph W. Benz, Rogers Lee Hill, M. L. Chang, Lewis E. Shapiro, and Y. Uehara.

Unaffiliated physicians were reported by the counties as follows: Hawaii 8, Honolulu 174, Kauai 4, and Maui 5. The Honolulu report does not include unlicensed physicians nor those with temporary and limited licenses. The cut-off date for this report was December 5.

By counties, the active membership was made up as follows as of December 31, 1969:

	ACTIVE DUES PAYING	ACTIVE DUES WAIVED	TOTAL
Hawaii	50	6	56
Honolulu	611	59	670
Kauai	21	1	22
Maui	44	4	48
TOTAL.....	726	70	796

Since the last annual meeting there have been six Council meetings. These were held on July 27, September 28, December 7, December 29, February 6, and April 3.

At the July 27 meeting the Council voted to write to the AMA outlining the present status between HMA and HMSA. Gave the Commission on Medical Services permission to solicit county society approval and decide what statistical information on fees should be released. It was voted to have the officers make assignments for a priority system to determine which representative or committee member should attend mainland meetings (other than those of the AMA's House of Delegates) at HMA expense. Dr. Robert Mytinger's project for a Health Occupations Study Program was endorsed. It was voted to increase the annual meeting exhibitor's fee from \$150 to \$250. The 1971 reservations at the Princess Kaiulani Hotel were confirmed for May 19-22. The Department of Health was formally requested to involve the HMA in reviewing applicants for the position of School Health position. The Council voted that physicians should become actively involved in developing a Child Abuse Center in a medical setting. A total of \$500 was appropriated for the 1970 careers day program. It was voted that there be continued expansion of Operation Pacific. Also voted was that there be a continuation of the programs on socioeconomics. Dr. Grover Batten's nomination as chairman of the Cancer Commission was approved. The matter of an interim House of Delegates meeting was left to the discretion of the president, and the matter of providing refreshments for the National Convention of Medical Assistants to the discretion of the officers. It was voted to obtain from the HMA legal counsel an opinion in regard to the tax-exempt status of the Maui County Medical Society if it should accept monetary gifts. The rewrite of the Tumor Registry grant application was approved. It was voted that the HMA participate in a proposed picnic for students from the University of Hawaii Medical School. A letter to the Mabel Smyth Board was authorized advising that the HMA was unable to pay the rent increase. It was voted to invite the President of the Woman's Auxiliary to attend all Council meetings.

At the September 28 meeting the Council voted to accept the recommendation of the Bureau of Research and Planning that (1) the Hospital Committee be asked to pursue the problem outlined in the Sanazaro Report of establishing a uniform means of measuring the quality

of medical care in the hospitals; and (2) that Dr. Beverly C. Payne prepare a protocol, with himself as principle investigator, for the evaluation of personal medical care within the State of Hawaii and to pursue its implementation in association with an advisory group of the HMA. Dr. Oren's report on computer applications in medicine was accepted as circulated. Maui County advised that Mr. Albert Yuen of HMSA met with a few of their members and discussed the feasibility of pre-paid medical care plans with groups to compete with a plan such as Kaiser. The OCHAMPUS request for reimbursement was referred to the Finance Committee for recommendations. It was voted to cosponsor the Conference on Environmental Control with the Department of Health. An appropriation of \$100 was voted for SAMA. The purchase of a typewriter and two filing cabinets and the installation of another telephone were approved. It was voted to have the members of the Council review the Peters report. Dr. Lowrey was given a vote of thanks for his work in developing a personnel policy handbook. The Thursday opening of the House of Delegates was set at 2:00 P.M. Approval was given to go outside the usual channels to solicit exhibitors. It was voted to extend invitations to the military physicians who had helped with the plans for Dr. Dorland to attend the dinner being given in his honor. It was voted to submit the job description of the legislative secretary to Peat Marwick & Mitchell to be incorporated in the over-all study. The Council went on record as supporting the principle of national health insurance. Funds were appropriated to enable the neighbor island representatives to attend the Workmen's Compensation hearing in Honolulu including air fare and \$35 per diem. Support was given to the American Cancer Society's Smoking Withdrawal Clinic project. It was voted to have Drs. Goto, Sia, and Mills make a personal appearance before the Governor and present the facts in regard to the family planning clinics on Molokai and Kona. Rather than a Health Careers Council as proposed, it was voted that there be a Health Advisory Committee to the Careers Committee, the advisory committee to be made up of appropriate people in the allied health professions. A total of \$170 was voted for the Medicine and Religion Committee's activities in conjunction with Dr. McCleave's visit. The proposal that the Message of the Month insert be discontinued in favor of a monthly newspaper insertion was approved. The idea of establishing a "Pulse Line" to receive complaints was referred to the county societies. Disbursement in the amount of \$400 from the Physicians' Benevolent Fund was authorized. However, this was not done pending IRS clearance. It was voted to pay Mabel Smyth Building the monthly rent as billed. The members of the Council were polled to see if another day and time would be more satisfactory.

At the December 7 meeting Maui asked that the action pertaining to midwifery taken at the previous meeting be deleted. The president was directed to give highest priority to appointing a new committee which would direct itself towards the problems of the newly emerging health specialties. A token payment was approved for the Aloha Temple earmarked for a special transportation fund for crippled children. It was voted to contract with the University of Hawaii to help with the HMA's annual meeting. It was voted to have the Medical Practice Act Committee poll the membership on the removal of the residence clause and to develop a position statement for the HMA regarding its relationship with osteopaths so that the way can be paved for a common examining board. The Workmen's Compensation Committee was told to inform the Department of Labor that HMA approves the principle of establishing fees on a usual, customary, and reasonable basis; that the definition of these terms be that as defined by the HMA House of Delegates; and that fees based on profiles for providers and physicians be true profiles. The Medical Care Plans Committee was asked to develop a position for Council action relative to HMA's providing peer review for other

insurance carriers and its now offering to provide this to the Department of Labor, and the statement that what HMSA really would like from HMA would be for the HMA to handle the review of HMSA claims. Deferment was granted Drs. Mills, Goto, and Sia in carrying out a previous Council action relative to the Molokai and Kona family planning centers. It was voted to have the HMA assume the sponsorship of the January Drug Abuse Seminar. A position statement on drug abuse prepared by Dr. John R. Stephenson was adopted; his statement on smoking on school premises was not adopted. A program proposed by the Diabetes Committee to test high school students for glycosuria was approved. It was voted to inform the Department of Health that Maui County Medical Society is not in any way interested in future courses on midwifery. The AMA's policy relative to medical care being a right rather than a privilege was adopted. The Health Careers Committee was asked to spell out details of finances for the ongoing program they suggested and that the person in charge be a member of the HMA staff under the direct supervision of the committee. Action on IRS status for the Physicians' Benevolent Fund was deferred. Insurance for members and staff traveling on HMA business was approved. No action was taken on the OCHAMPUS request and further inquiries will be referred to legal counsel for reply. It was agreed to give members who do not normally receive free posters, one copy at no charge if it is requested. It was voted that the HMA allow neighbor island councillors to provide their own transportation and they be reimbursed retroactive to the July meeting. In answer to the request for approval of the Bank of Hawaii's charge plan for physicians' bills, it was voted to advise the Bank of Hawaii of the AMA's position and that the HMA supports that opinion. The report was circulated to the membership. It was voted to refer the proposed European charter trip to the county societies. However, when it was determined that this would not permit all counties to participate, the officers subsequently agreed to cosponsor the trip with the Hawaii Bar Association. The Honolulu County Medical Society submitted guidelines for development by an ad hoc committee relative to community health. These were accepted. It was voted to allow per diem for councillors and the president of the Woman's Auxiliary for the February 6 meeting. A meeting of county presidents was proposed. Industrial Indemnity's TDI plan was accepted, and it was voted that the HMA assume the responsibility of the premiums for the employees. It was voted that an ad hoc committee on environmental health be appointed and that the Bylaws Committee be instructed to prepare revisions in the Bylaws to include current committees to be members of this committee. It was voted that the HMA become a sustaining member of the Woman's Auxiliary of SAMA.

On December 29 a special meeting was called to review the Peat Marwick & Mitchell report. The Council met in executive session and approved the narrative report.

At the February 6 meeting approval was given to adopt the policy of the Legislative Committee that the HMA's position be repeal of the abortion law with proper medical safeguards. County societies were urged to involve house officers and medical students, changing their Bylaws if this would be necessary. It was voted to transfer from the President's Contingency Fund to the appropriate travel accounts the amounts approved for mainland and inter-island travel. Registration fee waivers were voted for interns, residents, paramedical people, and guest speakers. The recommendation to waive the fee for nonmember military physicians was not accepted. Action developing a workshop on PAS was deferred. The Medical Education Committee was asked to present a definitive plan for continuing medical education by the time the House of Delegates meets. In answer to a request to establish a policy on accepting advertis-

ing from out-of-state laboratories, the Council voted to refer this matter to the AMA. Support was given to the proposal that the Legislature be asked to provide funds for payment of professional services connected with the rental dialysis and transplant programs. It was also approved to advise our members of Congress of the difficulties the HMA has had with the DSS. A letter relative to Workmen's Compensation was directed to be sent to HMSA rather than the Department of Labor. The Medical Care Plans Committee was asked to develop a policy outlining the circumstances under which the HMA should ask insurance companies, government agencies, etc., for statistical information and for performing administrative and fiscal functions not now in its jurisdiction. A set of basic guidelines for peer review was accepted and the Bylaws Committee instructed to include such a committee in the Bylaws. Members of Congress were asked to support the proposal that chest x-rays be made mandatory for extension of visas. The proposal that next year's theme for the scientific portion of the annual meeting be "New Challenges to Chronic Disease" was referred to the Scientific Program Committee. Funds were allocated for printing a sex education booklet. Dr. Mills volunteered to contact Dr. Quisenberry relative to the announcement that no further secretarial help would be given to the Maternal and Perinatal Mortality Study Committee. New divisions in the journalism awards were established. It was voted to provide funds to send someone to Chicago for the March Congress on Socio-Economics of Health Care and New Concepts of Physicians' Assistants. Commendation was given Dr. Stephenson for the well-executed Drug Abuse Seminar. The Bureau of Research and Planning was asked to come back with more definite recommendations for implementing its recommendation that the HMA be more active to bringing about coordination of community health planning. The status of the PBF advisory committee was noted and it was voted to combine the HCMS and HMA pension plans if this would be mutually beneficial. The Personnel Team's recommendations relative to job descriptions and personnel policies were accepted despite staff dissatisfaction. Clarifications in the Cancer Commission set-up were adopted. Election of members to the HAMPAC Board was deferred pending change in the HAMPAC Bylaws. The Awards Committee was instructed to prepare a special award for a retired physician. Dr. Goto was asked to report back to the Council at its next meeting on the status of HMA's request that the regulations prohibiting group malpractice coverage be relaxed.

The April 3 meeting of the Council was primarily a budget meeting. Before the HMA finances were discussed, the following actions were taken: (1) To postpone plans for holding a PAS Workshop until a more appropriate time after Dr. Beverly C. Payne's study has been completed. (2) To resubmit to the Medical Care Plans Committee to come up with recommendations in regard to requesting statistical information and for performing administrative and fiscal functions which is to be channeled through proper levels. (3) To refer to the Bylaws & Parliamentary Committee to refine the responsibilities and duties of the Commissions and Commissioners. (4) To accept the advice of the Bylaws & Parliamentary Committee with regard to deferment of any proposed changes. (5) To nominate George H. Mills, M.D. to the AMPAC Board and the AMA Legislative Council. (6) To continue the investigation of malpractice insurance and carriers. (7) To continue the activity of the Workmen's Compensation Committee and its relationship with the Department of Labor. It should be noted that progress in this area is slow. (8) To ask the Commission on Medical Services to explore with the Department of Social Services relative to the delivery of medical services for the care of their clients at the usual and customary fee under a foundation plan insured with an insurance carrier. (9) To write to the California Public Health Department concerning an out-of-state labora-

tory wishing to advertise in the HAWAII MEDICAL JOURNAL. (10) To deny requests for funds from outside organizations: (a) placing an ad in the Catholic Herald's Christmas edition, and (b) School of Public Health externship. (11) To send the usual delinquency letters out to members who have not paid their dues, and if the dues are not received 30 days after the date of the first letter, that these members be dropped from the HMA.

The Treasurer's report and proposed budget were circulated, reviewed, and discussed, and action taken at that time is reflected in the Treasurer's report.

The Council accepted Miss Lee McCaslin's wish not to accept the position offered to her as Assistant Executive Secretary, and accepted her resignation as of April 3, 1970. A Koa Bowl was presented to Miss Lee McCaslin for her many years of loyal service.

The Council appointed Mr. H. Tom Thorson as acting Executive Secretary of the HMA pending ratification by the House of Delegates and all county medical societies, and the Council approved, in principle, the concept of an administrative merger.

The 1971 Annual Meeting dates of the HMA are from the week of May 16-22 at the new Sheraton meeting hall.

RECOMMENDATION: (1) That the Council be granted permission to change the sites and dates of the annual meetings if unforeseen events develop to make the change advisable.

R. VARIAN SLOAN, M.D.

Addendum to Secretary's Report

The following was decided after the Finance Committee report on Miss Lee McCaslin's termination. (Special Council Meeting, May 4, 1970 at 4:45 P.M.).

Discussed at length the termination of Miss Lee McCaslin. It was voted to give her an equivalent to three months pay effective April 3, 1970 in lieu of her claim.

It was also voted that the acceptance of Miss McCaslin's resignation effective April 3, 1970 shall not be deemed to interfere with her eligibility relevant to the extent that she would otherwise be entitled to benefits in accordance with the HMA Retirement fund.

It was also acted that the \$1,500 advanced to Miss McCaslin for transferable membership in Oahu Country Club be recovered.

R. VARIAN SLOAN, M.D.

Secretary's Report

Your Reference Committee considered the report of the Secretary and noted the following corrections in paragraph 4: Eight members died in 1969: Harrison Paynter, Shosei Yamanoha, Hoei Higa, Rudolph W. Benz, Rogers Lee Hill, M. H. Chang, Lewis E. Shapiro, and Yokichi Uyehara. Your committee also noted that the second sentence in item (5) under the April 3 meeting should be deleted and not be printed in the proceedings of the House of Delegates. Your committee recommends that the Secretary's recommendation and the addendum to the report be approved.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

TREASURER'S REPORT

The breakdown of income and expense at the end of this report contains: (1) Proposed budget for 1970-71, as approved by the Council. (2) Actual income and expenses for the first eight months of the current fiscal year. (3) The amounts approved by the House of Delegates for the 1969-70 fiscal year.

General and Special Funds: For the fiscal year ending June 30, 1969, the general fund was \$96,582.84, including \$89,829.43 in the various savings and loan accounts. The same figures for 1968 were \$89,324.32 and \$93,042.13. The reason the general fund was greater at the close of the 1968-69 fiscal year even though the

amount of money in the savings and loan accounts was smaller was because the 1968 figure included accounts payable in the amount of \$9,992.13, whereas in 1969 there was no such liability. The general fund figures listed include depreciation. As of February 28, 1970, the unaudited figures were \$81,926.60 and \$60,615.08 compared to \$99,493.98 and \$63,819.94 at the same date in 1970. On February 28, 1970, there was \$6,164.17 in the checking account, compared to \$23,715.56 in 1969, a large portion of which was transferred to savings and loan accounts early in April.

As of February 28, 1970, the Physicians' Benevolent Fund had accumulated \$33,148.73, compared to \$31,501.62 the same time last year. The total value of the Employees' Retirement Fund as of February 28, 1970, was \$28,548.84. The same time last year it was \$16,417.46. The 1969 figure does not include the annual HMA contribution.

Comments on the fiscal outcome of two special events are included in this portion of the report. The Drug Abuse Seminar held in January generated an income of \$2,643.50. Deducted from this amount were the cost of the lunches, \$1,556.75, plus miscellaneous expenses totalling \$196.00. Still to be deducted are the costs of the kits which will be sent to the participants. No HMA funds were requested for this project, which was co-sponsored by the American Public Health Association. The second special project was the Health Careers Day held on February 18. The Council allocated \$500 for this project, a small amount of which was used. The various non-HMA exhibitors contributed approximately \$730.00 towards the expense of renting the hall and equipment. The total bill from HIC was \$381.12 and the booths cost \$374.40. The difference plus half the cost for the students who came from the neighbor islands are the HMA's only obligations. It should be noted that these two events brought about increased expense in the postage and supplies accounts but no cost accounting was done to prorate these costs.

1969-70 Income: The total budgeted for the current fiscal year was \$93,410.00. It would now appear that the total will probably reach \$97,130.00. The principal reasons for the increase are: (1) Increase in membership in Maui and Kauai counties. (2) Less deficit in the JOURNAL account due to the transfer of charges for the publishing of the annual meeting proceedings from the JOURNAL account to the Annual Meeting account. (3) A large increase in the annual meeting income; an increased number and amount of subsidies in excess of the amounts to be spent for speakers; a \$100 raise in the booth fee which will be charged the commercial exhibitors; and the initiation of charging a fee to the voluntary health agency exhibitors.

The original estimate of 45 nonmember registrants at \$50 each has not been changed. The proposed post-convention tour of the AGA was cancelled. (4) Increase in miscellaneous income account: due to additional income from the AMA for membership transmission and to the 15 percent administrative costs received from the Cancer Commission for handling salary checks and benefits for an employee who started working for the Commission on January 1. (5) The Roster income will be less because of fewer ads and higher printing costs than anticipated. The income on the Roster account depends to a great extent on the support of the members which encourages the advertisers to place insertions. This year's setback in the number of pages of advertising in two instances can be directly attributed to doctors' advising prospective advertisers not to advertise. The President referred the matter of the anticipated higher printing costs of the Roster to the Finance Committee. He asked that the committee negotiate with the Star-Bulletin Printing Co. about the anticipated high printing costs of the Roster, and prepare a report for discussion at the House of Delegates.

1969-70 Expense: The expenses will probably run about six thousand dollars less budgeted due mostly to

the following: (1) Legal Counsel: there was less use of the legal counsel's time since he was not called upon to act for the Association in either Workmen's Compensation or HMSA negotiations, and he was not asked to attend the Council meetings. (2) Committee expenditures: the committees did not use the amounts allowed by the House of Delegates: i.e. (a) The cost of the printing of the RVS will probably be charged during the next fiscal year. (b) The Legislative Committee may not have a party for the legislators. (c) Mr. Lytle's services were terminated February 28. (The employment of Mr. Darr to work with the "Medically Speaking..." production is reflected in the TV committee's account). Differences in amounts budgeted and the probable total which will be spent in the current fiscal year may be noted in the following: (1) Audit. An extra amount will be needed to process the Physicians' Benevolent Fund IRS investigation. (2) Auto allowance: Less due to changes in personnel. (3) Council travel: less, despite an extra meeting, since Dr. Miyamoto was unable to attend any of the meetings. (4) Council meal cost: up because of the extra meeting and increased attendance. (5) Per diem: This was not budgeted. Reimbursements are being made to the neighbor island councillors. (6) Insurance costs: less, despite TDI and the new policy of covering people who travel on HMA business with trip insurance. This is due to the fact that \$43.00 allocated for the purchase of Foundation Plan Health insurance for Pat Godfrey was not used. (7) Miscellaneous: less than budgeted. (8) Postage charges: more than budgeted. (9) President's Contingency Fund: Less, items originally charged to this account were transferred to the accounts relating to the nature of the expense (i.e. mainland and inter-island travel) and so this account will probably be only about half spent. (10) Rent: the rate went up from \$411.30 to \$601.20 beginning in September. (11) Retirement: Extra charges were rendered by the present actuary and charged to the retirement fund account. (12) Telephone and Cable: Less due to the removal of the WATS line, a saving was accomplished in the telephone and cable account despite installation of additional telephone. (13) Furniture and Fixtures: Increase due to purchase of new files and typewriter which were not anticipated are shown as charges in excess of budgeted amount in the furniture and fixture account. (14) The Council adopted a personnel policy calling for annual physicals of all employees. The Council recommended that the Personnel Team set up guidelines for the type of physical examinations the HMA employees should have, recommend whether or not the employee should have free choice of physician, and to set a limit on the amount to be paid for physical examinations.

1970-71 Expenses: Since the Personnel Team has not had an opportunity to hold a meeting to set a limit for HMA employees' physical examinations, the amount of \$250 will be included in the budget for 1970-71.

Mr. Ajifu has requested a \$50 a month increase in the fee paid for his accounting services. Last increase was in 1969. Auto expenses are projected as being reduced to eliminate that amount being allocated to the retiring executive secretary. Council expenses are based on five meetings with the addition of per diem allowances. Insurance estimates are up to cover the approximately \$30 a month for TDI insurance and the trip insurance. The full \$1,000 President's Contingency Fund appears in the proposed budget for the next fiscal year. An actuarial assessment of the pension fund is due. The charges for this work are made against the retirement fund. Whether or not the present HMA contribution will be increased or decreased will depend upon the actuaries determination. Until the staffing of the HMA offices is settled, no salary figure can be projected and so the current figure is inserted for convenience. The payroll for the HMA staff for March will run approximately \$4,000.00. Multiplied by 12 this would amount to \$48,000.00 annually. It is customary to give the employees a 5 percent cost

of living increase effective July 1 of each year and a 2 percent bonus at Christmas time. These amounts are figured into the projected budget each year.

There is not expected to be any change in the trend of increasing costs for stationery and supplies, which have been going up rather steadily for a number of years. Subscription and dues projection is decreased to eliminate payments to the Oahu Country Club. If the new Bylaws are approved a proposed, the Council will be very much restricted in making adjustments to the budget. These adjustments may become very important and so a special authorized expense allocation has again been included. For the present fiscal year, almost all of this allocation was spent on the Peat Marwick & Mitchell report. Social Security taxes accrue in ratio to the new payroll. It should be noted that the HMA is paying these taxes on the following employees who do not work in the HMA offices: Bert Darr, Gordon Burke, and Virginia Seiberg, now, and Mrs. Wall after she starts on the JOURNAL. No taxes were paid for Mr. Lytle who was not on the HMA payroll. Nor have taxes been paid for Mr. Ajifu and Mrs. Pape. TDI insurance coverage is required by law for all the part-time employees for whom taxes are paid. Inter-island travel covers costs of physicians, principally the president and president-elect, who travel to the neighbor islands. Airfare for one person to each of three neighbor islands runs about \$117.00. Reimbursement for hotel, taxi, etc., expenses are added to this. Mainland travel includes the AMA meetings, plus \$3,000 for unexpected mainland travel. The June meeting, in Chicago (\$1,768.08 for airfare plus \$1,800.00 for per diem) is included in the current fiscal year projection. The 1971 clinical annual convention will be held in Boston and the Council allocated to budget for two people, instead of three, to attend (the Delegate or his alternate and the Executive Director or an alternate). The 1972 annual convention will be held in Atlantic City and the allocation is figured on five people (executive director, delegate, alternate delegate, president, and president-elect). Both meetings are figured on the basis of weekend Y class travel and \$50 per diem (six days at the annual convention and five days at the clinical meeting) for the physicians and \$25 per diem for the executive. For Boston the figures are \$1,429.17 and \$875. For Atlantic City the figures are \$2,292.00 and \$1,800.00. During the current fiscal year it has been found necessary to cover the costs of four mainland trips. These were authorized by the president but the charges were transferred from his contingency fund to the mainland travel account since the full contingent of representatives at the AMA meetings allowed for was not used. Woman's Auxiliary allocation is based on \$8.00 per active dues paying member as recommended by the Council. No allocation to the Auxiliary is given for inactive members. The furniture and fixture account is the usual \$600.00. The Bylaws requires that each committee submit its budget request to the House of Delegates and it is presumptuous for the Treasurer to project what these requests will be. However, it can be noted that since the new RVS has not yet been printed, that the bill for this printing will come in after the end of the current fiscal year. The book has not been sent out for bid and the quotations will depend upon how many changes the Fee Survey Committee decides to make in the California 1969 RVS, which will be the basis for the Hawaii RVS. The House of Delegates has already given the Council the authority to approve the Council's recommendations for revisions in publishing the next RVS. We do not know if the Legislative Committee will hold its annual party for the legislators in either 1970 or 1971. However, it is not included in this report for either year. The allocation for the Legislative Counsel is unchanged. The cost of producing the Message of the Month in the form of a newspaper ad is much lower than printing inserts and this has been taken into consideration. Whether or not the PR Committee plans to ask for funds to reinstate the position of coun-

sel is not known but no figure for this is included in this draft of the budget. However, funds are included to pay Mr. Darr for the work he is now doing which is part of the work that was formerly done by Mr. Lytle. It should also be noted that there is \$226.75 still owing from the Mid-Pacific Press on the contract to print the 1968 Roster. This accounts receivable is not reflected in the accounts. The Council recommended that this account be assigned to the Bureau of Medical Economics for collection.

RECOMMENDATIONS: (1) That the proposed budget be approved. (2) That the dues for the calendar year 1971 remain the same. (3) That Leong and Leong, our present auditors who have served us well, be retained.

HERBERT Y. H. CHINN, M.D.

NAME OF ACCOUNT	INCOME		
	ACCUMULATED 8 MOS. 1969-70	BUDGETED 1969-70	PROPOSED 1970-71
Membership Dues.....	\$ 46,294.25	\$ 98,520.00	\$102,640.00
JOURNAL.....	(4,977.91)	(8,130.00)	(9,890.00)
Annual Meeting.....	5,608.72	(30.00)	5,000.00
Annual Roster.....	150.39	(1,350.00)	(6,240.00)
Interest Income.....	1,985.65	3,400.00	3,800.00
Miscellaneous Income.....	517.36	1,000.00	1,200.00
Miscellaneous Scientific Meetings.....			
Gain or Loss on Various Activities.....			
What Goes On.....			
	<u>\$ 49,578.46</u>	<u>\$ 93,410.00</u>	<u>\$ 96,510.00</u>
NAME OF ACCOUNT	EXPENSES		
Annual Physicals.....			\$ 250.00
Audit & Accounting			
Audit.....	\$ 520.00	\$ 500.00	520.00
Accounting.....	1,725.00	2,300.00	3,000.00
Auto Expense.....	680.00	1,200.00	600.00
Council Expenses			
Travel.....	407.86	780.00	580.00
Meals.....	239.10	200.00	250.00
Per Diem.....	141.88		450.00
Donations.....	20.00	20.00	20.00
HAMPAC.....		200.00	200.00
Insurance.....	751.10	1,600.00	1,800.00
Library Contribution.....		100.00	100.00
Legal Counsel.....		1,500.00	1,000.00
Meeting Expenses.....	2,823.25	4,000.00	4,000.00
Miscellaneous.....	70.92	300.00	200.00
Postage			
Stamps.....	23.61	200.00	50.00
Bulk Mailing.....	693.71	800.00	1,000.00
Permit.....	30.00	30.00	30.00
Meter Rental & Postage.....	1,259.28	1,500.00	1,800.00
President's Contingency			
Fund.....	358.40	1,000.00	1,000.00
Rent.....	4,429.80	4,950.00	7,220.00
Repairs & Maintenance.....	198.30	300.00	300.00
Retirement.....	5,708.37	5,330.00	6,000.00
Salaries.....	29,163.45	46,500.00	46,500.00
Stationery, Printing & Supplies.....	2,237.80	3,000.00	3,500.00
Subscription & Dues.....	851.35	950.00	650.00
Special Authorized Expenses.....	2,606.09	2,500.00	2,500.00
Taxes			
Social Security Taxes.....	1,122.13	2,200.00	2,300.00
Unemployment Compensation.....	203.26	300.00	300.00
Other Taxes.....	98.59	100.00	100.00
Telephone & Cable.....	1,151.83	2,000.00	1,700.00
Travel			
Inter-Island.....	383.62	700.00	600.00
Mainland.....	3,277.06	7,000.00	9,400.00
Woman's Auxiliary.....	2,604.50	4,200.00	5,864.00
Furniture & Fixtures.....	752.50	600.00	600.00
Committee Expenses.....	9,043.58	22,075.00	31,174.00*
	<u>\$73,576.34</u>	<u>\$118,935.00</u>	<u>\$135,558.00</u>
Less JOURNAL Expenses.....	(\$5,600.00)	(\$8,400.00)	(\$8,400.00)
Less Roster Reimbursement.....		(1,550.00)	(1,550.00)
Less Annual Meeting Reimbursement.....	(1,900.00)	(2,470.00)	(2,470.00)
TOTAL EXPENSES.....	<u>\$66,076.34</u>	<u>\$106,515.00</u>	<u>\$123,138.00</u>
EXCESS OF Expenses OVER Income.....	<u>(\$16,497.88)</u>	<u>(\$13,105.00)</u>	<u>(\$26,628.00)</u>

* Reflects committee expenses approved by the House of Delegates.

Treasurer's Report

Your Reference Committee next considered the report of the Treasurer and recommends approval of all recommendations.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

FINANCE

The following were acted upon by the committee during the past year:

Accident and Life Insurance: The committee recommended to the Council that accident and life insurance be taken out for those traveling on HMA business as follows: (1) that any physician traveling on behalf of or at the request of HMA be insured for \$100,000, and that each individual designate the beneficiary of his choice; (2) that the Executive Secretary traveling on behalf of the HMA be insured for \$50,000 and that the HMA be the beneficiary; (3) that any nonmember traveling on behalf of or at the request of HMA be insured for \$50,000, and that each individual designate the beneficiary of his choice. These recommendations were subsequently approved by the Council and being implemented.

Physicians Benevolent Fund: Mr. Melvin Leong of Leong and Leong met with the committee relative to the PBF, and after thorough discussion it was voted to place the PBF under Section 501(c) (3) status. This is now being applied for by Mr. Leong. Recommendations will be forthcoming as soon as this status is clarified.

Medical Plaza Incorporated: Since the project of the Medical Plaza, Inc. is defunct (at the corner of Queen Emma and Beretania Sts.), the committee recommends that the \$30,000 committed by HMA to Medical Plaza, Inc. be invested in an income-producing project.

Increase in Monthly Rental by Mabel Smyth Building: In September, 1969, the Mabel Smyth Board informed the HMA that its monthly rental would be increased due to the fact that the HMA used the Conference Room more often than any other organization in the Mabel Smyth Building. This increase was not allocated in the 1969-1970 budget. The increase amounted to \$189.90.

HMA Roster: The Star-Bulletin Printing Company presented an estimated cost breakdown in contract form for the HMA Roster and the initial figure submitted was \$7,700 but the final bill totaled \$9,467.95. Mr. Burke was asked to meet with the Finance Committee to explain the charges above the estimated \$7,700. After thorough discussion, Mr. Burke agreed to deduct \$491.80 from the \$9,467.95. The committee recommended that the Publications Committee become more involved in the publications (Roster and HAWAII MEDICAL JOURNAL) of the HMA. The committee further recommended that the Publications Committee simplify the Roster and that the cost of the Roster be no more than \$2.00 apiece.

RECOMMENDATIONS: (1) That the HMA enter into an aggressive investment project involving the purchase of income-producing property. (2) That the Finance Committee be given permission to proceed with such a project provided permission is obtained by polling or by having a special meeting of the Council before any project is finalized.

HERBERT Y. H. CHINN, M.D.

Finance

Your Reference Committee next considered the report of the Finance Committee and recommends that Recommendation No. 1 be changed to read as follows: That the Finance Committee continue to study the possibility of an aggressive investment project involving the purchase of income-producing property and that the results and recommendations of the study be presented to the Council. Your Reference Committee recommends that Recommendation

No. 2 be deleted and in its place substitute the following statement: That the Finance Committee study a means of compensation to the President and any other officers of the Association whose duties on behalf of the Association necessitate an appreciable loss of time and income from the practice of medicine.

ACTION:

The Chairman moved adoption of this portion of the report. For clarification of recommendation number 1 as amended it was noted that the Finance Committee should present their study to the Council and then to the House of Delegates. The Chairman moved adoption of this portion of the report. It was adopted.

LEGAL COUNSEL

This report covers the calendar year 1969 and partially overlaps the last annual report. Your legal counsel attended, at your expense, one Council meeting in the month of April, 1969, the meeting of the House of Delegates in Hilo, and has handled certain administrative calls and matters for the Association in the past year. Among the administrative matters dealt with were a wage and hour question relating to the employees of the Association, which were referred to specialist counsel.

Although not a direct Hawaii Medical Association action, your counsel assisted in the preparation for the application for a tax exemption certificate for Community Research Bureau, which was formed several years ago by your Association for the undertaking of research projects in the medical and health related fields.

Your legal counsel has no recommendations.

V. THOMAS RICE

Legal Counsel

Your Reference Committee next considered the report of the Legal Counsel and recommends that the report be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MALPRACTICE INSURANCE

This is a report of the task force on malpractice insurance which was formed during the latter part of 1969. The chairman has been assisted by two other members, Drs. A. Chun-Hoon and P. Lee.

During most of this time your committee has familiarized itself with many aspects of the malpractice situation that now exist, not only locally but nationally.

We have taken three actions which are worthy of report: (1) We have supported and helped in setting up the T.D.I. insurance. One side benefit of this program is to promote our image as a qualified group of doctors for the purpose of insurance coverage. (2) We have had the chairman of the Legislative Commission and our Legislative Counsel contact the Department of Regulatory Agencies to see if they will relax their requirements for group insurance for a so-called "fictitious group." The reasoning and purposes behind this are multiple and hardly worth repeating in this report. (3) We asked the Legislative Committee to introduce three bills patterned after those prepared by the California Medical Association.

RECOMMENDATION: (1) That further study and work be continued by a Malpractice Insurance Committee.

ELMER C. JOHNSON, M.D.

Malpractice Insurance Task Force

Your Reference Committee next considered the report of the task force on malpractice insurance and recommends that the recommendation be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PERSONNEL TEAM

This team was appointed in December, 1969, to study and assist in implementation of the recommendations of the Personnel Study made by Peat Marwick and Mitchell & Co. on the structure and functions of the HMA office staff. Recommendations were submitted to the Council regarding establishment of office policies, job descriptions, a personnel manual, table of organization, performance record and other forms, settlement of grievances and disputes, and continuous review to effect necessary changes when they are needed. Suggestions received from the staff were discussed with them in detail.

Significant progress has been made and the team will continue to act in an advisory and consultative status.

No resolutions and no budget requests are being submitted, as it is assumed that such printing and form acquisitions as are found necessary will come out of the regular operating expenses of the HMA office budget.

CLAUDE CAVER, M.D.

Personnel Team

Your Reference Committee next considered the report of the Personnel Team and recommends that the committee continue to serve in an advisory and consultative capacity and that the advisability of a standing Personnel Committee be considered by the Bylaws Committee.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

STUDY ON QUALITY OF PERSONAL MEDICAL CARE

The Bureau of Research and Planning in its concern for professional and community responsibility undertook a preliminary survey in 1967 to determine whether it would be feasible to study the quality of medical practice in our State. Dr. Paul Sanazaro was engaged for this study in November, 1967 through funds granted by the Chamber of Commerce, and his report was published in the HAWAII MEDICAL JOURNAL in July 1968. Recommendations for evaluation and extension of this study were made to the Hawaii Medical Association by Dr. Sanazaro. This eventuated in the engagement of Dr. Beverly Payne from the University of Michigan as project director for a more detailed study. After a preliminary visit here, Dr. Payne, utilizing resources at University of Michigan, developed a project proposal to study the quality of personal medical care in the State of Hawaii. This project received a contract grant from the National Center for Health Services Research and Development.

The project is divided into three phases:

(1) Episode of illness where specific diseases are studied in both the hospital and ambulatory settings and another set of illnesses will be used to study office practice.

(2) Cost study where cost will be related to medical service and quality.

(3) Self-appraisal or continuing education phase designed to create an awareness and acceptance of the need for a continuing self-evaluation by physicians of the quality of medical care. Institutional programs will also be developed to measure and effect changes in the quality of medical care.

The members of the Hawaii Medical Association have the key role in this study and only our cooperation can allow completion of the study. The study is guided by an advisory group of the Hawaii Medical Association, and the criteria used as standards of measurement are

developed by panels of physicians from the Hawaii Medical Association.

RECOMMENDATION: (1) Hawaii Medical Association and all related health facilities and services provide continued and full support to this study.

RICHARD MAMIYA, M.D.

Study on Quality of Personal Medical Care

Your Reference Committee next considered the report of the Study Team on the Quality of Personal Medical Care presently underway. Your Committee recommends acceptance of the recommendation.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HAMPAC

The Hawaii Medical Political Action Committee continues to function. It was an off-election year in 1969 and therefore, the activity was at a low ebb. In spite of this, our membership continues to be about two hundred.

The function of HAMPAC is to support, on the local and national level, campaigns of Legislators and Congressmen who support the ideas and views of medicine. HAMPAC also serves the function of educating the physicians in the area of politics especially in the area of medical legislation.

We are hoping in 1970 to get the Auxiliary more enthused and involved in the purposes and projects of HAMPAC.

DON E. POULSON, M.D.

HAMPAC

Your Reference Committee next considered the report of HAMPAC. A full and complete discussion was held. Your committee recommends acceptance of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AMA DELEGATE

In 1969 the Annual Meeting of the American Medical Association was held in New York and the Clinical Session in Denver.

Much of the discussion at both sessions involved the health care system of this country and especially how it relates to the areas of manpower-government and costs. It was pointed out on several occasions that the major difficulty with government sponsored programs was that they were poorly conceived.

Peer review was discussed frequently at both sessions. There was general feeling this activity was the prime responsibility of the practicing physician. All medical societies were encouraged to develop active review programs.

At the Denver meeting the House of Delegates set in motion a process to make long range planning and development a permanent program of the AMA. They also adopted a clear cut policy on marijuana.

Throughout both sessions there was much deliberation regarding health care of the poor. There was new policy adopted and reaffirmation of old. I quote one accepted significant policy statement: "Health care of the poor should not be disassociated from but rather should be a vital part of the overall health care system."

The AMA-ERF Institute of Biomedical research was discontinued at the Denver meeting due to the high cost of operation.

Recently the HMA has opened positive lines of communication with AMA to host the 1972 Clinical Session here in Hawaii. This should be confirmed at the June

AMA annual meeting in Chicago.
RECOMMENDATION: (1) That the HMA House of Delegates reaffirm their previous desire to host an AMA Clinical Session in Hawaii.

GEORGE H. MILLS, M.D.

AMA Delegate

Your Reference Committee next considered the report of the AMA Delegate and recommends that his recommendation be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

LEGISLATIVE COUNSEL

As this report is being written, the Legislature is still in session and in its 52nd day. To date, only four bills have passed both houses of the Legislature. Due to disagreement between the Senate and the House on the Operating Budget and the Capital Improvement Budget, there are indications that either an extended session or a recess will be necessary in order to resolve these differences. In view of this situation, the outcome of bills in which the Hawaii Medical Association is interested is to a large extent unknown.
A brief analysis of the more noteworthy bills in which the Hawaii Medical Association has an interest is hereby submitted.

Abortion Bill: This far-reaching legislation passed both the Senate and the House early in the session and is now law. The purpose of this bill is to repeal the laws on abortion. An abortion may be performed (a) by a licensed physician, (b) in a licensed hospital, (c) to any woman who has been physically present within the State of Hawaii for 90 days.

Medical Examiner Bill: The purpose of this bill is to establish a statewide Medical Examiner System and a Medical Examiner Commission within the Department of the Attorney General. This bill has passed the Senate and is presently awaiting disposition in the House. Outcome of passage is not good.

Temporary Licensure of Physicians Bill: The purpose of this bill is to allow a physician who has not passed the national board examination or the local state board examination to work as a physician for a government agency for an indefinite period under a temporary license which is subject to annual renewal by the Board of Medical Examiners. Private practice of medicine under this type of license would be prohibited. This bill has passed the House and awaits passage in the Senate. The outlook for passage is good.

Medical Practice Bill: The purpose of this bill is to amend certain requirements concerning qualifications of applicants for licenses to practice medicine. The bill provides that a person who has completed one year of residency training in a program approved by the American Medical Association, Council of Medical Education and Hospital, shall be qualified to take the medical examination. It also provides that those who have passed the Federation Licensing Examination with scores deemed satisfactory to the Board shall be licensed without the necessity of taking an examination. This bill has passed the Senate and awaits passage in the House. The outlook for passage is good.

Peer Review Bill: The purpose of this bill is to provide civil liability immunity for any member of a peer review committee so long as the member acted without malice. Identical bills are presently pending consideration in both the Senate and the House. Passage outlook is not good. The Legislature seems inclined to await the outcome of a suit which is presently being tried in the Circuit Court.

Birth Control Services to Minors Bill: The purpose of this bill is to enable physicians to render birth control services to minors who meet certain broad qualifications. Due to the great amount of controversy engendered by the Abortion bill, the Legislative Committee felt it best not to pursue action on this bill at this session.

Workmen's Compensation Fee Bill: The purpose of this bill is to change the method of compensation under Workmen's Compensation law from the relative value basis to the "usual, customary and reasonable" value basis. Since this bill was introduced very late in the session and entails considerable and detailed preliminary study and effort between the Department of Labor, the medical profession and the insurance carriers, the outlook for passage is not good. Efforts are presently being made to effect a more equitable fee schedule through administrative changes rather than through a law change. In the event these efforts are not fruitful, I suggest that the Association work closely with the Insurance Carriers and the Hawaii Medical Service Association to see whether some equitable and satisfactory solution cannot be effected prior to the next legislative session.

In order for the Association to meet its goals and objectives, may I suggest that (a) Mrs. Becky Kendro be assigned "full" time and if at all possible that she be given additional clerical assistance to review and screen bills affecting the Association, and (b) that all legislative efforts be coordinated through the Legislative Committee of the Association.

I wish to take this opportunity to thank the Hawaii Medical Association for giving me this opportunity to serve the Association. I also wish to thank all of the members of the Legislative Committee for their support.

CLESSON Y. CHIKASUYE

Legislative Counsel

Your Reference Committee next considered the report of the Legislative Counsel and recommends acceptance of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MABEL SMYTH BOARD OF MANAGEMENT

The Board of Management of the Mabel L. Smyth Memorial Building met quarterly. Installation of the air-conditioning system on the first floor is almost completed and we have been able to keep within our budget of \$20,000.00.

Our financial position is sound, with no bills outstanding. The Auditor's Report is on file and available in the Director's office.

The Nurses and Physicians Exchange averaged 23,138 calls per month during the year. There was a slight decrease in membership but we expect to pick up again during the year. Membership, in addition to two clinic groups, is as follows:

	1970	1969
Physicians	277	279
RNs	83	94
LN's	23	25
Radio Page	109	116

We are currently negotiating with Hawaiian Telephone Company regarding equipment for an intercepted service, whereby phone calls will be intercepted by the Nurses and Physicians Exchange after a designated number of rings in the doctor's office. A study is underway to determine the feasibility of this service, which involves an expenditure of over \$10,000.00 and will require 14 months before operation can begin.

CARL H. LUM, M.D.

Mabel Smyth Board of Management

Your Reference Committee next considered the report of the Mabel Smyth Board of Management and recommends acceptance of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

KAUAI

The Kauai County Medical Society adopted a plan during this year of having quarterly meetings instead of monthly meetings. However, during the year, there were only three effective meetings due to doctors being away or ill.

During the year, the County Society co-sponsored, along with the Public Relations Committee of the HMA, sending Kauai students to Honolulu for Careers Day. The County Society also co-sponsored with the Lions' Club a Diabetes Detection Drive which was considered to be highly effective.

At one of the unofficial meetings of the Society, the members present listened to and endorsed the program of vaccination of school children with rubella vaccine although no effective participation of the County Society was required since this program was, in part, sponsored by the U.S. Public Health Service. The Society also listened to presentation of possibility of fluoridation of water supply on the Island but did not take any specific action regarding such.

The Society entertained a request from Kauai Veterans Memorial Hospital to endorse an attitude of requesting executive powers for the planned Advisory Committee for State Hospitals. This matter was deferred to first meeting of the ensuing year in order to listen to more presentation from Department of Health members and sister County Societies.

CHARLES C. CUSTER, M.D.

HONOLULU

More and more the medical profession is becoming involved in socio-economic problems. This has been predicted by the past presidents of the society and their warnings have been borne out.

During the past year we have been deeply involved in the exploration of the problems of peer review in a number of its aspects. The county society has been active in this field for many years through its Medical Practice Committee, Medicare Claims Review, Medical Care Plans & Fees Committee, Utilization Review, etc. It is now obvious to us that further exploration of the overall implications of peer review must be carried out. To this end HCMS has engaged in the establishment of an overriding coordinating Peer Review Committee to bring all of the aspects of this process into their proper perspective.

We have continued to experiment with the Foundation for Medical Care. Its operation has been streamlined to some extent and processes speeded up. New approaches are being explored as this is written with closer cooperation between medicine and labor in developing programs to control the general costs of overall care with a fair return to the profession. More will be heard of this at a later date.

Community planning for health services has been a high priority item on the Society plan. We have had some success with the placement of three physicians in the Leeward area and plans are proceeding with the organization of services for the north shore. Legislation correcting some of the problems of the Progressive Neighborhoods program relating to health care has been enacted.

The participation of the Society in the study toward reorganization has brought about a new administrative approach to many of our problems. The Board of Governors has approved in principle the merging of the administrative staffs of the HCMS and HMA, the general idea being to consolidate activities and provide a better service to the organization, particularly the neighbor islands. This proposal is very complex and will require patient understanding on the part of all parties if it is to be successfully brought about. At the moment the County Society has loaned Mr. Thorson to HMA until some decision can be made as to the actual consolidation of staff. He will act as the administrative

officer of both organizations for the moment.

The regular recurring programs of the HCMS have continued without abatement.

I wish to thank my fellow officers and staff of the HCMS for their support and their untiring efforts on behalf of the Society.

RICHARD S. OMURA, M.D.

MAUI

The Society's motto for 1969 was "Community Involvement." This was successfully accomplished in many ways throughout the year.

Mainly through the efforts of Dr. Jose Romero and with the support of the Society, a Medical Explorer Post No. 189 Boy Scouts of America was established.

The Society co-sponsored with the Alcoholism Coordinating Committee of Maui, June 17-18, a Conference on Alcoholism. Among notables present was Judge Sam King.

There was a successful conference October 8-9 on Comprehensive Health Planning on Health Care Costs. A dialogue was established between all participating groups.

A Medical Center feasibility study was undertaken and varying segments of the Maui population were approached. The results indicated that this was not economically feasible at the present time. However, it was noted that a fully-equipped emergency center was urgently needed in West Maui.

The Society sponsored the Diabetes Screening Program under Dr. A. Y. Wong which was completed in December in the Shopping Centers rather than at the County Fair and the number of community participants doubled as did the yield of positive results.

The Rubella immunization program was very successful on Maui with 90% of the kindergarten through 6th grade children being immunized. Many of the physicians donated their time in cooperation with the Department of Health.

The Society participated in and strongly endorsed the campaign for the fluoridation of Maui's water supply.

There were a few conflicts with the Department of Health regarding their unilateral decision to establish a Venereal Disease Clinic that was unsuccessful and their proposal for the establishment of a Midwifery course on Maui. However, there has been more communication and understanding recently between the Society and the local Board of Health.

Our Society considered the Annual Meeting in Hilo as eminently successful. Our resolutions regarding: (1) A common examining board for both M.D.'s and D.O.'s, and (2) establishment of local autonomous boards of trustees for Act 97, Hospitals, were adopted by the House of Delegates. These proposals were prepared and written by our present President, Dr. Sakae Uehara.

The Society would like to express our sincere thanks for the tremendous kokua from the HMA Legislative Committee and the Honolulu, Kauai and Hawaii County Societies' individual endorsements of our Senate Bill 1509-70 regarding local governing bodies for County/State Hospitals. This Bill is being debated in the 1970 Legislature.

The Regional Medical Program of Hawaii Pilot Study Visiting Professor Program was well received and beneficial to both doctors and nurses. Unfortunately future funding was terminated March, 1970.

We were especially proud that our own Dr. Milton M. Howell of Hana was selected for the A. H. Robins Award as Hawaii's Physician of the Year.

The Society was pleased to be addressed by Dr. Miyamoto, President, and Dr. Mills, President-Elect, in February, 1969, and by Dr. Gerald Dorman, President of the AMA in October, 1969.

The year was concluded with a formal Christmas dinner-dance at the Sheraton-Maui Hotel where the undersigned was greatly honored and thankful for a plaque awarded me by my fellow Society members. I

thank the Society for their 100% kokua and the honor of being their president for 1969.

JOHN F. MORRIS, M.D.

HAWAII

The last year of the decade, 1969, was relatively uneventful for the Hawaii County Medical Society.

We enjoyed the privilege of having several outstanding speakers at our monthly meetings. The final meeting of the year was the usual enjoyable Christmas dinner with our wives and friends.

The Society was especially honored by a visit of Dr. Gerald Dorman, President, American Medical Association, in October.

Physician shortage has become a critical issue which we hope will be solved within the near future.

GEORGE BRACHER, M.D.

Hawaii, Honolulu, Kauai and Maui County Reports

Your Reference Committee next considered the reports of the four county medical societies and recommends they be accepted.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 6

This resolution relates to the staff merger of the Hawaii Medical Association and Honolulu County Medical Society. Your Reference Committee recommends that this resolution be adopted.

ACTION:

The Chairman recommended that Resolution No. 6 be adopted. It was voted to adopt the resolution as recommended.

RESOLUTION NO. 6 AS ADOPTED

Re: Staff Merger of Hawaii Medical Association and Honolulu County Medical Society

WHEREAS, The Council of the Hawaii Medical Association and the Board of Governors of the Honolulu County Medical Society both saw fit to have an administrative study made of their respective organizations, and

WHEREAS, The studies indicated a need for and recommended a consolidation of administrative functions, and

WHEREAS, There has been thoughtful consideration of the implications of such a merging, and

WHEREAS, The advantages appear to outweigh the disadvantages, now therefore be it

Resolved, That the House of Delegates of the HMA favor the consolidation of the administrative staffs of HMA and HCMS, and be it further

Resolved, That the officers of HMA and the county medical societies develop plans to submit to the HMA Council for consideration.

Submitted by JOHN J. LOWREY, M.D.

ACTION:

The Chairman moved adoption of this report as a whole as amended. It was adopted.

INSURANCE AND MEDICAL SERVICES REFERENCE COMMITTEE

Mr. President and Members of the House of Delegates:

Your Reference Committee met before an audience of approximately 12 physicians and received testimony on the various resolutions and reports to the committee for

consideration and recommendation. Having heard the discussions of the witnesses and having given careful consideration to all the testimony presented to it, your Reference Committee is pleased to make the following report:

ADJUDICATION

This committee has not been called upon to act during the past year.

ALBERT CHUN-HOON, M.D.

Adjudication

Your Reference Committee considered the report of the Adjudication Committee. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CRIPPLED CHILDREN

The committee had one meeting this past year.

Again, the recurrent problem of the fee schedule for services rendered the CCS by physicians was raised. It was the unanimous opinion of the committee that the present conversion factor of \$5.00 was unrealistically low. The committee recommended that in the negotiating of fees with the CCS, DSS, etc., that the Council consider \$7.00 as a more equitable and realistic conversion factor.

It was also brought out in a discussion that the Department of Health is losing two other physicians in key positions because of low wages and because of the increase in work due to vacancies unfilled because of the inability of the Department of Health to recruit new physicians. In the interests of community health, it was recommended by the committee that we go on record in recommending that government physician salaries be increased by 50%.

RECOMMENDATION: Despite the availability of pamphlets on the types of services available through CCS, there still appears to be some question of what congenital defects are covered by the CCS. At a future meeting, it might be worthwhile to invite an officer from the CCS Branch to discuss this.

FRANCES F. NAKAMURA, M.D.

Crippled Children

Your committee next considered the report of the Crippled Children Committee. A full and complete discussion was had. Your committee recommends that the last sentence in the second paragraph be amended as follows: "The committee recommended that in the negotiating of fees with the CCS, DSS, etc., that the Negotiating Committee consider at least 7.0 as a more equitable and realistic conversion factor." Your Reference Committee recommends that "by 50%" in the last sentence of the third paragraph be deleted and the following added: "to a more equitable figure." Your committee recommends approval of this report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

NEGOTIATING

During the year 1969, this committee met with Veterans' Administration representatives in an attempt to establish a conversion factor to be effective in 1972, in accordance with the rules and regulations of the Veterans' Administration. The present conversion factor is 6.5 and was effective August 7, 1969. Veterans' Administration officials through the local office informed this committee that it is premature to negotiate for any conversion factor at this time but reminded us that if a schedule for 1972 is not forthcoming by April, 1970, we

should initiate correspondence with their office. This will be done shortly.

There were no meetings with HMSA.

Meetings with DSS in an attempt to negotiate a conversion factor over and above the present 5.0 has met with no success.

RECOMMENDATIONS: (1) No budgetary request is being made. (2) Meetings with Veterans' Administration representatives with regard to negotiations for a conversion factor to be effective in 1972 should be held soon. (3) In light of attempts for closer working relationships with HMSA by other committees under the HMA, it is strongly recommended that the HMA Council review and, if necessary, clarify or change its policy with HMSA.

CHIEW MUNG LUM, M.D.

Negotiating

Your committee next considered the report of the Negotiating Committee. A full and complete discussion was had. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PEER REVIEW

This committee was assigned to the Medical Services Commission. Its members have not yet been named.

Peer Review

Your committee considered the report of the Peer Review Committee. It was noted that members of this committee have not been named. Your committee recommends that the incoming president appoint members to this committee for the following year. Your committee recommends approval of this portion of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AD HOC COMMITTEE TO STUDY RMP

It was not necessary to hold any meetings of this committee.

RECOMMENDATION: (1) That this committee be dissolved.

RICHARD D. MOORE, M.D.

Ad Hoc Committee to Study RMP

Your committee next considered the report of the Ad Hoc Committee to Study RMP. Your committee recommends approval of this portion of the report.

Mr. President, I move adoption of this portion of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICAL EDUCATION

Most of the effort of the Medical Education Committee was directed toward the development of the Continuing Health Education Council. This Council is presently in existence and has been incorporated. A Regional Medical Program grant request has been forwarded to Washington and we are waiting word regarding funding of this program. If it is properly funded, this program promises a great deal of aid in terms of program development for the Hawaii Medical Association.

Although CHEC will be of great help in developing programs, the impetus for the development of the programs will have to come from the HMA itself. For this reason, the Medical Education Committee has reviewed

programs utilized throughout the country in increasing physician motivation. Specifically, we reviewed the program of the Oregon Medical Association which requires for membership in the Association, participation in continuing medical education programs. The committee feels that such a program would not be warranted in view of the difficulties in managing it and the fact that such programs do not insure learning, i.e. a change in behavior.

It is the opinion of the Medical Education Committee, moreover, that medical education programs have to be determined on the basis of physician needs. The most effective way of determining physician needs is the medical audit. This having been instituted by the Hawaii Medical Association (the so-called Beverly Payne study), the committee feels that future programs should be based on the results of this study.

It should be pointed out, however, that adequate liaison between the study itself and the Medical Education Committee is not in existence at the present time. If the Medical Education Committee is to utilize the results of this audit, a member of the Medical Education Committee must be represented in the study itself.

It has also become apparent that development of programs require time and money. Neither is available to the Medical Education Committee members. Whereas, the California Medical Association provides 7% of its total annual budget for their Committee on Continuing Medical Education. (This is exclusive of annual convention costs.) The Medical Education Committee of the HMA has no budget. In addition, the committee works almost devoid of staff help, thus much physician time is required in developing programs, collating facts, etc. It is the opinion of the committee that if it were given a budget and a permanent staff member, with the help of the continuing health education council, several programs might be developed over the next year.

Suggestions as to possible programs are:

(1) Develop short sabbaticals at teaching hospitals for practitioners in order to reinforce scholarly motivation and attitudes and to acquire new skills and knowledge.

(2) Develop seminars and short intensive courses in areas of greatest need. These should be developed in association with the U. of H. and specialty societies.

RECOMMENDATIONS: (1) That the HMA demonstrate its support of continuing medical education by allocating 7% of its annual total budget to continuing education programs, exclusive of annual convention costs and costs utilized in publishing the HAWAII MEDICAL JOURNAL. (2) That the HMA demonstrate its support of the Continuing Health Education Council by utilizing \$1,000 of this budgeted amount as a donation to CHEC. (3) That the chairman of the subcommittee on continuing medical education of the Medical Education Committee be made a permanent member of the committee which presides over the Beverly Payne project.

M. G. BOTTICELLI, M.D.

Medical Education

Your committee next considered the report of the Medical Education Committee. A complete discussion of the subject was had. Your committee recommends approval of Recommendation No. 1 as amended: "That the HMA demonstrate its support of continuing medical education by allocating \$5,000 for continuing medical education programs after having received prior approval of the Council." Your committee further recommends approval of Recommendations 2 and 3. Your committee recommends approval of this report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

INDIGENT MEDICAL CARE

It has not been necessary for this committee to hold meetings since much of the business has been handled by the Commission on Medical Services. The Greenleigh

Report, an audit of the Medical Assistance Program of the State of Hawaii, was not available to the public until late March. It is a very long and detailed report of the entire medical assistance program.

RECOMMENDATION: (1) It is recommended that the first task of the new Indigent Medical Care Committee be to study the Greenleigh Report.

CLIFFORD T. DRULCKER, M.D.

Indigent Medical Care

Your committee next considered the report of the Indigent Medical Care Committee. Your committee recommends approval of Recommendation No. 1 with the addition of the following words: "and that a summary be made to the Council and all the county societies within four months."

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMUNITY RESEARCH BUREAU

The Community Research Bureau was incorporated to provide an educational and research organization which could receive and disburse funds for the purpose of encouraging (1) needed support for medical education, (2) research into the broad spectrum of the social and economic aspect of the delivery of health care, and (3) directing attention to different methods of providing health care and services.

We have put in an application to the Internal Revenue Service for exemption from Federal income taxes as an organization under section 501 (c)(3) of the Internal Revenue Code. The position of the Internal Revenue Service, however, is that an organization is not exempt as a matter of course or through a mere claim of compliance with the statutory requirements. Exemptions will be recognized only when the evidence submitted to us shows that the statutory requirements have been met. Therefore, until we have established an exempt status we are not relieved of the requirements for filing Federal income tax returns.

On request of the Internal Revenue Service we have submitted additional evidence and information concerning our application under section 501 (c)(3). Up to the writing of this report the Community Research Bureau is still reluctant to seek such funds for our bureau in view of the absence of an exemption under section 501 (c)(3).

B. ALLEN RICHARDSON, M.D.

Community Research Bureau

Your committee considered the report of the Community Research Bureau. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PHARMACY

The Pharmacy Committee met on several occasions to discuss complaints of several members. Included in the meetings were members of the Drug Division of the State Health Department with whom we discussed mutual problems, all of which seemed to have been resolved satisfactorily.

Your chairman appeared before the Senate Ways and Means Committee to testify on a bill relating to the removal of the four percent tax from drugs and medical services. The position taken was that this tax should be deleted, however, the action of the Senate Committee was that there should be a tax credit plan rather than a deletion of the tax on drugs and medical services.

Once again, the Drug Division of the State Health Department has asked our cooperation in using identifying phone prescription numbers and more careful disposition of prescription blanks in the doctor's offices and in the hospitals. There have been several instances of forged prescriptions and care in the handling of prescription blanks is requested.

The Pharmacy Committee discussed at length the requirement of addresses on prescriptions and recommended that the HMA request the Department of Health to remove the requirements of addresses on prescriptions except those required by Federal law.

RECOMMENDATIONS: (1) It is requested that physicians continue to use care as they have in the past in prescribing medication for Medicaid patients. The cooperation thus far has enabled us to proceed without a formulary being presented and required.

JOHN F. CHALMERS, M.D.

Pharmacy

Your committee next considered the report of the Pharmacy Committee. Your committee recommends that Recommendation No. 1 be approved. Your committee further recommends that HMA request the Department of Health to remove the requirements of addresses on prescriptions except those required by Federal law. Your committee recommends approval of this report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AD HOC COMMITTEE ON COMMUNITY HEALTH SERVICES

No official meeting of the Ad Hoc Committee on Community Health Services was held for lack of a quorum.

RECOMMENDATION: It is recommended that this committee be continued.

GEORGE H. MILLS, M.D.

Ad Hoc Committee on Community Health Services

Your committee next considered the report of the Ad Hoc Committee on Community Health Services. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICAL CARE PLANS

The following report is for the fiscal year 1969-1970 and will be enumerated chronologically as the problems arose. The first proposal was that of Dr. Robert Chung who suggested that the HMA might agree to deliver health care for DSS recipients and the payment for such services would be in a lump sum delivered to HMA. This medical care would be rendered by practicing physicians in the State on a voluntary basis. This sum was mentioned as fifteen million dollars which would be left at the disposal of HMA for any reasons that might be beneficial to the society in a trust fund. One of the reasons suggested was to set up a retirement fund. The committee met on two occasions to discuss this proposal and needless to say many questions arose such as the effect that this proposal would have on physicians who depend on a DSS type practice, the effect it would have on non-HMA members, and how this medical service would be rendered to the 35,000 DSS recipients. It was the opinion of the committee that the plan does have some merit and certainly deserves to be pursued further. Because it is a huge undertaking, it was suggested that Dr. Robert Chung at some future date present his pro-

posal in more detail and perhaps suggest some solutions to the questions that arose from the discussion of his proposal. He is definitely interested in pursuing his proposal and future meetings will be necessary in order to fully understand the merits of such a proposal.

Another proposal that was acted upon was a request from HMSA to HMA concerning the formation of a peer review committee that would be made available to all parties concerned i.e. insurance carriers, in particular. Definite guidelines were set up during the discussion and certain recommendations were made for Council approval. The recommendations were accepted in principal and the Council asked that a peer review committee be established as a standing committee.

The Council requested the committee to review the extent of freedom in which a standing committee may carry out its business without informing or requesting authorization from the Council. The committee discussed this matter and voted that it recommend to the Council that the Commissioner be totally responsible for the standing committees under his commission and it is the commissioner who keeps the Council informed on all matters. It was further recommended that the By-laws and Parliamentary Committee be asked to spell out more specific guidelines on the duties and responsibilities of each Commission.

At the close of the fiscal year the committee embarked on a study of a bill introduced in the legislature concerning a state health insurance plan. This bill was extensive in its description and obviously would require a very detailed study by the committee in the future.

RECOMMENDATIONS: (1) This committee recommends further pursual of the proposal by Dr. Robert Chung and continued studies regarding the merits of such a proposal. (2) That HMA set up a Peer Review Committee that would be available for all parties concerned with medical services. (3) That the State Health Insurance Plan be studied in detail and recommendations made to the Council at some later date.

BENJAMIN C. K. TOM, M.D.

Medical Care Plans

Your committee next considered the report of the Medical Care Plans Committee. A full and complete discussion of the subject was had. Your committee recommends approval of Recommendations Nos. 1 and 2. Your committee further recommends the deletion of Recommendation No. 2 inasmuch as there is a Peer Review Committee in the process of being established. Your committee recommends approval of this report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WORKMEN'S COMPENSATION

The Workmen's Compensation Committee decided that the usual and customary and reasonable principle be adopted because from our Fee Survey Committee's report we have found that there is a range of fees for any one given procedure. The committee also discovered that over 50% of the Workmen's Compensation Cases are cared for by the Clinics. Consequently, Mr. Battisto of the Straub Clinic and other representatives of the Clinics were asked to become members of this committee.

Letters to HMSA and Aetna were written to ascertain the profiles of ten most common procedures. However, both HMSA and Aetna replied that they were not able to disclose any facts to us.

Two separate meetings were held with representatives of the insurance carriers at which time we explained our concept of usual and customary. We also explained the concept of Relative Value Studies. We informed them that the Veteran's Administration now pays at a conversion factor of 6.5 on the Relative Value Studies. How-

ever, we felt that to ask for 6.5 from 5.0 at this time was too inflationary since we know the average or mean of our Fee Survey Committee did not reflect this. Consequently we were more convinced that the usual and customary concept will be more equitable.

Mr. Robert Hasegawa, Director of Labor, met with this committee as a whole and disclosed the fact that he was not certain what our prevailing fees were because some of us participate in HMSA, Aetna, Foundation & DSS. He felt that the law as it stands now is unworkable and that the usual and customary principle might be more equitable to all parties concerned. He also suggested that we should take one year—say 1968 or 1969—as a base year and have our fees based upon the Cost of Living Index thereafter. He asked that both the insurance underwriters and our committee come up with an agreement so he could have the present law amended and presented as an administrative bill. Mr. Hasegawa said that the State had no profiles on the doctors and therefore he may have to subcontract with HMSA. Consequently I appointed a subcommittee composed of Dr. Nicholson, Mr. Battisto and myself. This committee met with HMSA representatives to find out the feasibility or whether HMSA would act as an intermediary in processing the claims of Workmen's Compensation cases. They were willing to do so at cost, provided we accept their definition of usual, customary and reasonable.

Through the grapevine we understand that the insurance carriers have also met with HMSA representatives.

I personally had Senator Yoshinaga introduce a bill for us on the basis of usual, customary and reasonable and that the fees for Workmen's Compensation cases be promulgated yearly instead of time to time at the discretion of the Director. I testified in favor of this bill. In reviewing the written testimony, the Director was in favor of our concept but the insurance carriers asked that this bill be postponed since they did not know what the actual cost to them from HMSA would be. Senator Yoshinaga asked both HMA and the insurance carriers to come to an agreement before making any amendments to the present law.

Subsequently Mr. Hasegawa called me, Mr. Battisto and the representative of the insurance carriers. At the meeting he said that he thinks he could work under the present law as soon as he can determine what is the prevailing fee for nonindustrial cases. He outlined the plan to call a public hearing in Honolulu and the neighboring islands—this time including Molokai—some time early in May. Then he will evaluate the evidence accumulated and hold another hearing in August in Honolulu and would especially call on the doctors who have written to him complaining of the unfairness of Workmen's Compensation law and the Director's promulgation.

On House Bill 449, House Draft #1, I went to another hearing on Wednesday, April 8, 1970, to testify against the expansion of services in Workmen's Compensation cases to Chiropractors, Naturopaths, Optometrists, and Masseurs. Both HMA and the insurance underwriters testified against this particular bill. However, during the hearing it became obvious that the Chiropractors, etc., had been compensated for the last twenty years.

The last meeting of this committee will be held Friday, April 17, 1970, to bring the members up to date.

RECOMMENDATIONS: (1) That this committee be an integral part of the Legislative Committee. (2) That the Legislative Committee not meet only during the session but that the Legislative Committee meet throughout the year in preparation for what will be beneficial to HMA.

THEODORE T. TOMITA, M.D.

Workmen's Compensation

Your committee next considered the report of the Workmen's Compensation Committee. A full and complete discussion was had. Your committee recommends that the fourth sentence of the third paragraph be deleted. The committee further recommends that the word "Furthermore" be substituted for the word "Consequently" in the following sentence. Your committee

recommends that the Recommendations Nos. 1 and 2 be deleted. Your committee further recommends that the Workmen's Compensation Committee work closely with the Legislative Committee. Your committee further recommends that any subsequent negotiations with any insurance carrier be prepared in conjunction with the Negotiating Committee. The committee recommends approval of this report as amended.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

FEE SURVEY

For the past three years, the Fee Survey Committee has been working on a revision of the 1965 Hawaii Relative Value Studies. The study is now completed and ready to be printed. The committee has met diligently at almost weekly intervals since the last report to the House of Delegates. Many representatives of specialty societies have also generously given of their time and advice to help the committee.

BUDGET REQUEST:	
Statistical Services	\$ 600.00
Preparation for Printing.....	500.00
Printing of the RVS.....	3,000.00
Issuance of Addenda.....	500.00
Statewide Educational Seminars.....	850.00
<hr/>	
TOTAL	\$5,450.00

RECOMMENDATIONS: (1) The Fee Survey Committee recommends that the revision of the Hawaii Relative Value Studies be accepted, printed, and distributed immediately. (2) That the treasurer of the HMA be authorized to appropriate monies for publication of the RVS. (3) That the treasurer of the HMA also appropriate monies for educational seminars for physicians and office personnel for instruction in the use of the new RVS. (4) That the budget set forth above be approved for 1970-71.

FREDERICK B. WARSHAUER, M.D.

Fee Survey

Your committee next considered the report of the Fee Survey Committee. A full discussion was had. Your committee recommends that an addition to the first recommendation be made as follows: "The Fee Survey Committee recommends that the revision of the Hawaii Relative Value Studies be accepted, printed, and distributed immediately after it had been proofread by the specialty societies." Your committee recommends approval of the Recommendations Nos. 2, 3, and 4 and the Budget Request. Your committee recommends approval of this report as amended.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

HOSPITAL

The Hospital Committee has met during the past year keeping in mind the possibility of establishing a uniform means of evaluating the quality of medical care in the hospitals. The committee sent out a questionnaire to every hospital in the state of Hawaii to determine the use and acceptance of PAS (Professional Activity Study). The return showed that there are only six hospitals in Hawaii who use the PAS systems which are: Kuakini, Queen's, Hilo, St. Francis, Kaiser, and Children's Hospitals. The committee was informed that the Department of Health is planning to put the PAS system into all acute hospitals operating under Act 97 and funds will be requested of the legislature to do this.

The best methods of educating physicians as to the

value of the PAS were discussed and the committee decided that we should meet the chiefs of staffs and head of the medical records librarians of the hospitals. Such a meeting was held at which meeting film strips were shown demonstrating how PAS operates. After considerable discussion it was felt that probably the best way to educate the physician as to the value of PAS is to hold workshops. It was suggested that a PAS workshop be held in Honolulu in conjunction with the 1970 annual meeting of HMA. Dr. Beverly C. Payne who has considerable knowledge on this subject was consulted as to the feasibility of holding a workshop with our annual meeting, however, he requested that it would be best that we defer these workshops until he has had an opportunity to present the data of his study concerning the Quality of Personal Medical Care in Hawaii.

B. ALLEN RICHARDSON, M.D.

Hospital

Your committee next considered the report of the Hospital Committee. Your committee recommends approval of this report.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON EDUCATION AND SCIENTIFIC RESEARCH

The major activities of this commission during the past year centered on activities regarding medical education and, in particular, continuing medical education.

The Hospital Committee investigated the possibility of sponsoring a PAS workshop in Hawaii for the practicing physician. The value and need of the workshop was apparent by a discussion with the major hospitals using this system. One of the major obstacles in the utilization of this audit system has been the lack of physician knowledge of PAS. The rewards of physician education in this regard may lead to more efficient and valuable auditing by the hospital committees, may point to deficiencies in patient care which can then become the areas of re-education at the hospital level and may be the mechanism for objective guides for peer review. It is anticipated that the study now being conducted by Dr. Beverly Payne will supplement and elucidate this method of audit which can become the framework for future local programs at the hospital level. It is urged that the members of HMA look into the potential value of PAS and become familiar with this system.

In view of the recent change in the staff organization of the HMA, the future role and organization of the HAWAII MEDICAL JOURNAL (HMJ) should be reinvestigated by the Publications Committee. It is desirable that the Publications Committee, specialized staff members of HMA who may have to be hired if not presently available, and our editor, Dr. Harry Arnold, should discuss the future organization of HMJ and clearly define the responsibilities of this important publication. Adequate support for this endeavor is necessary and should be a prime concern for the HMA delegates. The Publication Committee is now working on methods to achieve the mechanism and organization necessary for the continual publication of our journal.

The major endeavors of our hard working Medical Education Committee have been summarized in their report. It must be stressed that although CHEC is now firmly established, it needs the continual support of HMA and it must not and cannot relieve HMA of its own responsibility in continual medical education for its members. The method of education and the major financial support of this education must originate from within HMA. CHEC was first fathered by HMA but its responsibilities lie with all health organizations. CHEC will help HMA in implementing a program

which originates from HMA. The value of CHEC is improved health education which hopefully will result in improved patient care. The study conducted by Dr. Payne is certainly conceived to be one of the major means of help to assess the needs of medical education in Hawaii. The problem of developing a program for continual medical education is indeed complex and there is no ready means of accomplishing this goal for all our members. Nevertheless, it is believed that continual effort, particularly in the next year, may bring to fruition a program which can be presented to the next House of Delegates meeting in 1971.

It has been a privilege to serve as commissioner and I wish to thank the members of the staff of HMA who help make this task easier.

RECOMMENDATIONS: (1) That a PAS Workshop following Dr. Beverly Payne's study be made available in the next year for members of HMA. (2) That an organizational assessment of HMJ be made by the Publications Committee and reported to the House of Delegates or to the Council. (3) That the next medical education committee report on the developed or the proposed program for continuing medical education by the next House of Delegates meeting in 1971.

WINFRED Y. LEE, M.D.

Commission on Education and Scientific Research

Your committee considered the report of the Commission on Education and Scientific Research. A full and complete discussion was had. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON MEDICAL SERVICES

The Commission has met several times during the year to hear the reports of the committees and discuss matters which overlap in several committees.

The Commission wishes to commend the Fee Survey Committee for the tremendous amount of time and energy it has spent in preparing the revision of the Hawaii Relative Value Studies.

The Commission made several attempts to meet with management and labor and cooperated with the Public Relations Committee to produce several forums for the HMA membership with management and labor. The Commission had considered inviting labor leaders to attend the Commission meetings. We were informed, however, that a Hawaii Labor-Management Committee on Health Care had been formed and that representatives of that committee should meet with the Commission. A representative of the Labor-Management Committee felt that meetings with the HMA were premature (August 1969) and that the committee had other priorities at the time. The representative has not contacted the Commission since August 1969.

As outlined in the report of the Workmen's Compensation Committee, a measure was introduced in the Legislature to provide for the usual, customary, and reasonable fee concept for industrial cases. The insurance carriers opposed the measure and felt that more time was needed to work out administrative costs. The Department of Labor has informed the committee that hearings on the fee schedule will be held in early May. In this regard, it is urged that all those interested be prepared to testify at the public hearings. It is recommended that those who wish to testify be prepared to present documented evidence of their usual fee and the fee allowed by Workmen's Compensation on their invoices.

It should also be noted that many of the people who have worked toward securing a change in the procedures for fixing fee schedules have become very disheartened and discouraged with the attempts to update the Work-

men's Compensation Fee Schedule. Consideration is being given by many people who treat industrial cases to bring a civil suit to insure that the requirements spelled out in the law are being fulfilled.

It is noted that the recommendation of the Workmen's Compensation Committee is that the committee be made a part of the Legislative Committee. While agreeing that these two committees should work closely together on legislative matters, there are interests of the Workmen's Compensation Committee which require that it be an independent committee and it is the feeling of the Commissioner, that the Workmen's Compensation Committee best be situated under the Commission on Medical Services.

The Indigent Medical Care Committee has not met during the past year. The Greenleigh Report, an audit of the Medical Assistance Program of the State of Hawaii, was not available to the public late in March, 1970. It is a voluminous report and should be studied in depth by the Indigent Medical Care Committee at its earliest convenience.

The report of the Negotiating Committee is interpreted to mean that the committee is asking the House of Delegates or the Council to decide whether there should be any change in the relationship between the HMA and the HMSA. Perhaps the House of Delegates should reconsider its instructions given to the Negotiating Committee in May of 1967. If there is to be no change in the relationship with HMSA, then all committees of the HMA should be instructed not to have any negotiations with HMSA or its representatives.

RECOMMENDATIONS: (1) In the event a civil suit in regard to the Workmen's Compensation Fee Schedule is brought to light, that the HMA give consideration to joining the suit as a plaintiff. (2) That further attempts be made to meet with representatives of labor and management. (3) That the Workmen's Compensation Committee continue as a committee under the Commission on Medical Services. (4) That the Indigent Medical Care Committee study and make recommendations to the Commission and HMA Council on the Greenleigh Report. (5) That the Medical Care Plans Committee study and make recommendations to the Commission and Council on a proposed State Health Insurance Plan and the proposal of Dr. Robert Chung.

RICHARD D. MOORE, M.D.

Commission on Medical Services

Your committee next considered the report of the Commission on Medical Services. A full and complete discussion was had. Your committee recommends that Recommendation No. 1 be deleted. Your committee recommends approval of Recommendations Nos. 2, 3, and 5. Your committee further recommends that Recommendation No. 4 be amended as follows: "That the Indigent Medical Care Committee study and make recommendations to the Commission and HMA Council on the Greenleigh Report and that a summary be made to the Council and all the county societies within four months." Your committee recommends approval of this report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 5

This resolution relates to equitable administration of DSS Medical Program.

ACTION:

The Chairman recommended that Resolution No. 5 be adopted. The delegation from Maui did not feel the resolution should be adopted because it singled out an individual group. Their

motion not to adopt the resolution was defeated. The Chairman recommended that Resolution No. 5 be adopted. It was adopted.

RESOLUTION NO. 5 AS ADOPTED

Re: Equitable Administration of
DDS Medical Program

WHEREAS, The various public welfare programs have been subject to review and criticism during the past few years, and

WHEREAS, Most of the criticism has been directed toward the medical profession because of the spiralling costs of care for the public, and

WHEREAS, Approaches have been made by the Department of Health, Education and Welfare in controlling physicians' fees, and

WHEREAS, Physicians fees represent only a small part of the total cost, and

WHEREAS, Only the medical profession is capable of measuring the quality of care in comparison to the cost, and

WHEREAS, The Foundation for Medical Care has demonstrated in California its capability of controlling costs and quality of care, now therefore be it

Resolved, That the House of Delegates of the Hawaii Medical Association encourage the Honolulu Foundation for Medical Care to begin negotiations with the Department of Social Services to insure DSS patients under a Foundation plan through any qualified insurance carrier.

Submitted by JOHN J. LOWREY, M.D.

RESOLUTION NO. 8

This resolution relates to the Honolulu Foundation for Medical Care. Your committee recommends that the word "a" be substituted for the words "the most" in the second WHEREAS.

ACTION:

The Chairman recommended that Resolution No. 8 be adopted. It was adopted.

RESOLUTION NO. 8 AS ADOPTED

Re: Honolulu Foundation for Medical Care

WHEREAS, The Honolulu Foundation for Medical Care is having an increasing effect upon the health insurance industry in the State of Hawaii; and

WHEREAS, The Foundation for Medical Care offers the most complete coverage to the citizens of the State of Hawaii; and

WHEREAS, The House of Delegates has already gone on record as being in support of the Foundation concept; and

WHEREAS, Although it is sponsored and directed by the Honolulu County Medical Society, it operates on a statewide basis with participating physicians on all of the islands; and

WHEREAS, It is a part of the growing Foundation movement on the mainland; now therefore be it

Resolved, That the House of Delegates recommend to the Board of Directors of the Honolulu Foundation for Medical Care and to the Board of Governors of the Honolulu County Medical Society that the name of the Honolulu Foundation for Medical Care be changed to "Hawaii Foundation for Medical Care."

Submitted by O. D. PINKERTON, M.D.

RESOLUTION NO. 9

The Reference Committee recommends that this resolution relative to a Uniform System of Coding for Description of Medical Services not be adopted.

ACTION:

The Chairman recommended that the resolution not be adopted. It was voted not to adopt the resolution.

The Chairman moved adoption of this report as a whole as amended. It was adopted.

MISCELLANEOUS BUSINESS REFERENCE COMMITTEE

Mr. President and Members of the House of Delegates:

Your Reference Committee met before an audience of approximately 25 physicians and guests and received testimony on the various reports and resolutions submitted to the committee for consideration and recommendation. Having heard the discussions of the witnesses and having given careful consideration to all the testimony presented to it, your Reference Committee is pleased to make the following report:

AMA-ERF

The AMA-ERF Committee has continued to urge members of our State Medical Society to make contributions to the AMA Education and Research Foundation. Various pamphlets have been sent out from the headquarters AMA encouraging contributions. Included has been a pledge card for AMA-ERF's 3-year installment program. In 1969 the total contributions were \$14,156.47, of which \$1,405.00 were contributed by physicians and \$12,751.47 by the Woman's Auxiliary. Also, as in the past several years a check from the AMA-ERF will be presented to the University of Hawaii School of Medicine for \$2,625.45 at the annual HMA banquet. The committee has no new plans for the coming year and requests no budget at this time.

ROBERT T. S. JIM, M.D.

AMA-ERF

Your Reference Committee considered the report of the AMA-ERF Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

CAREERS

Health Careers Day, February 18, 1970: More than 1,000 high school students attended morning exhibits at the HIC and afternoon field trips at Honolulu hospitals. More than 250 adults attended a 7:00-9:00 P.M. exhibit at the HIC. The Woman's Auxiliary of the HMA assisted the Careers Committee to make this a very successful day. In order of students' preferences the exhibits were as follows: Hawaii League for Nursing, Hawaii Society for Medical Technology, University of Hawaii School of Medicine, Castle Hospital Nursing Training, Hawaii Inhalation Society, American Physical Therapy Association, Kapiolani Community College, University of Hawaii Speech Pathology & Audiology, Hawaii Dental Association, Honolulu County Dental Assistants, University of Hawaii Dental Hygienists, Hawaii Dental Laboratory Technicians, Hawaii Association of Nurse Anesthetists, Radiology Technologists, Occupational Therapists, Medical Record Librarians, University of Hawaii Food and Nutrition, Social Workers, Hawaii Pharmaceutical Association, Hawaii Podiatry Association, Waimano Home Training, Hawaii Psychological Association.

The Council appropriated \$500.00 for this committee's activities.

Assets: HMA—\$500.00 + fees from Exhibitors (\$729.60)	\$1,229.60
Expenses: HIC charges \$755.52 + ½ air fares for neighbor island students (\$292.42)	1,047.94
Balance.....	\$ 181.66

Health Career opportunities: The Council has been asked to provide one-half of a secretary's salary, equipment, and supplies in order that the HMA can coordinate with Wah Jim Lee of the DOE to provide on-the-job experiences, literature, and student-to-student contact opportunities for high school and junior college students throughout the State on a year-round basis. The budget requested for this purpose is included in this report:

RECOMMENDATIONS: (1) The 1971 Careers Day be developed along similar lines as the 1970 event. (2) That the funds needed to implement the proposed year-round program be provided.

BUDGET:	
Secretary, ½ time.....	\$3,000.00
Equipment	800.00
Supplies	200.00
TOTAL.....	\$4,000.00

ROBERT W. NOYES, M.D.

Careers

Your committee next considered the report of the Careers Committee. A full and complete discussion of the subject was had. Your committee recommends that Recommendation No. 2 be reworded as follows: "That the Careers Committee be directed to form a Health Careers Council, and that \$2,000 be provided to implement the proposed program of this Council. Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

FILIPINO SPEAKERS BUREAU

The committee had no meetings during the year. However, members of the committee have been active in the community by accepting Filipino speaking assignments. The chairman presented a lecture to the Filipino speaking people on prenatal care at Queen's Medical Center. Other programs are planned on various topics such as obstetrics and public health. The group is enthusiastic and dedicated, but is confronted with the problem of everyone speaking different dialects.

CORAZON MANAYAN, M.D.

Filipino Speakers Bureau

Your Reference Committee next considered the report of the Filipino Speakers Bureau. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

ASSOCIATION OF PROFESSIONS

Our one and only meeting was held on September 26, 1969. After much discussion it was decided that a letter would be sent to each of the professions listed below in order to get an expression of interest in forming an Association of Professions. This letter stated the object and purpose of such a committee. Letters were sent to each president of following: architects, public accountants, lawyers, psychologists, pharmacists, nurses, veterinarians, dentists, social workers, educators, and engineers. Answers were received from the social workers, nurses, educators, and veterinarians who all seemed to be interested.

It is felt by this chairman, that the matter of forming an association should not be discarded and even though action is slow it should be pursued in the future because of the increasing number of problems that are arising amongst the professions. It is further recommended that perhaps a permanent member, probably from the staff, be assigned to this project who can retain continuity throughout the years and also be the public relations person who will continue to contact the various professions to gradually put over the purposes of the association of professions. For instance, in the field of insurance, it seems that in this day and age there has to be a large number that will be united in any project before it will become recognized.

LEABERT R. FERNANDEZ, M.D.

Association of Professions

Your Reference Committee next considered the report of the Association of Professions. A full and complete discussion of the subject was had. Your Reference Committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MEDICINE AND RELIGION

The committee held informal monthly discussion meetings during the year at the HMA offices with doctors and ministers in the community. Some of the various topics discussed were "Transplantation," "Buddhist Concept on Life and Death," and "Abortion Counseling." The Hawaii Council of Churches continues to assist in getting publicity and attendance to these meetings.

Dr. John Finch was guest speaker at the meeting of the Honolulu County Medical Society on June 3, 1969, on "Healing in Spirit."

The Rev. Dr. Paul McCleave, Director of the AMA Medicine and Religion Department, visited Hawaii during the week of October 20, 1969. While here, Dr. McCleave participated on HMA's television program "Medically Speaking . . ." on sex education. He addressed Kauai, Maui, and Hawaii County Medical Society sponsored meetings on various subjects. In Honolulu he spoke on "Ethics of Survival."

The committee sponsored a movie "A Storm—A Strife" to ministers and doctors on the evening of April 1, 1970, at the Mabel Smyth Auditorium, followed by a discussion group.

In Maui, a monthly breakfast meeting with doctors and ministers is currently being held.

The chairman participated in a conference on March 14, 1970, in Salt Lake City attended by chairmen of the Medicine and Religion Committees of the western state medical associations. Programs for seminary students as well as for interns and residents were discussed at this conference.

FRANCIS H. SOON, M.D.

Medicine and Religion

Your Reference Committee next considered the report of the Medicine and Religion Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

QUACKERY

During the past year there were very few items brought to the attention of the committee.

The one meeting of the year was held on January 28, 1970, at which time:

(1) It was agreed to check further on the activities directed at importation of Laetrile to Guam.

(2) The Ohio Quackery Law was reviewed, with no action being taken.

(3) Scientology in Hawaii was discussed, at the request of the Board of Medical Examiners, and the Board was advised to ask the Attorney General as to whether Scientology is, in fact, the practice of medicine without a license.

RECOMMENDATION: The only request of the committee is that it be given the blessings of the Hawaii Medical Association to work closely with the Public Relations Committee to approach the news media and obtain their cooperation in minimizing the amount of publicity given to cults and other forms of quackery.

WILLIAM H. SAGE, M.D.

Quackery

Your Reference Committee next considered the report of the Quackery Committee. A full and complete discussion of the subject was had. Your committee recommends, with the approval of the Chairman of the Quackery Committee, that the recommendation not be printed in the House of Delegates proceedings and that it be reworded to read as follows: "The only request of the committee is that it be given the blessings of the Hawaii Medical Association to approach the news media and obtain their cooperation in minimizing the amount of publicity given to cults and other forms of quackery." Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. A motion was made to also delete the second paragraph of the committee report. The Chairman moved adoption of this portion of the report as amended. It was adopted.

HAWAII MEDICAL JOURNAL

The last six issues of the JOURNAL have contained 548 pages, comprising 30 original articles, 19 editorials, 51 book reviews, and 30 capsule comments on books received. The previous feature sections were all continued: Hawaii Academy of General Practice, written by Fred Reppun; In Memoriam, by Betty Katsuki, installments 77 through 82; New Members; Notes and News, written by Henry Yokoyama in his inimitable style; President's Page; Slants and Angles, by W. Philip Jones; and X-Ray View Box, by various members of the Radiological Society of Hawaii.

Two new sections have been started: University of Hawaii, by Robert Noyes, and Inside HMA, by John Brown, in which affairs of the University and our own Association's committee activities, respectively, are summarized.

The financial side of the JOURNAL's activities are summarized elsewhere, in the Treasurer's Report.

We believe the JOURNAL has continued to be a significant asset to our Association, a credit to Hawaii's doctors, an outlet for worthwhile scientific contributions and reports. We think it is well worth what it costs.

With the resignation of our able and devoted Managing Editor, Lee McCaslin, the burden of producing the JOURNAL is going to have to be borne in part, pending the recruitment of an executive able to assume this job, by a local advertising agency, and as this report is written, in March, efforts to arrange this have been begun. The editorial tasks are not beyond your editor, but the management of the advertising schedules and the tedious and exacting task of "making up" the "dummy" of the magazine each two months, to instruct the printer in putting it together, require professional, full-time help for a few crucial days at a time.

Assuming that some such arrangement will have been arrived at by the time of our annual meeting, it is our recommendation that you authorize continued publication of the JOURNAL on the same basis as heretofore.

HARRY L. ARNOLD, JR., M.D.

Editor's Report

Your Reference Committee next considered the Editor's Report. A full and complete discussion of the subject was had. Your committee recommends that the phrase "on the same basis as heretofore" in the last paragraph be deleted. Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

MESSAGE OF THE MONTH

Between May 1 and October 1 the Medical Message of the Month Committee continued to compose and distribute the monthly message through the doctors' offices. We continued to face the problem of distribution to the doctors and the uncertainty of their mailing these messages in their billings. It was a question of whether the net effect justified the expense. Beginning October 1, following a long discussion in the committee and the approval of the HMA Council, the message was inserted in the Sunday newspapers as an advertisement. At first, it was placed in the "Family Living" section, and more recently in the "Television Guide." This change occurred following advice of the newspaper advertising people and in order to draw attention to the Association's television program. To date we have no information on reader response. This is to be undertaken by the newspaper at a later date.

The following messages were composed during this year:

1969

May.....	All Mothers Present and Future
June.....	}.....No message
July.....	
August.....	
September.....	Hawaii's Heart
October.....	All Who Use Medicine
November.....	Those With Fevered Brow
December.....	All Who Need Some Fresh Air

1970

January.....	Those Who Yearn to be Slim
February.....	The Breath of Life
March.....	Some Plants Cure . . . Others Kill
April.....	Smoking and Viruses: The Perilous Pair
May.....	The Drug Scene

RECOMMENDATIONS: The committee recommends (1) That the Medical Message of the Month Committee merge with the Television-Radio Committee, and (2) That the message be continued in its present format since it serves two purposes: that of a public service message and as a reminder of the Association's television program.

BUDGET REQUEST:

Printing \$1,200.00

WILLIAM F. MOORE, JR., M.D.

Message of the Month

Your Reference Committee next considered the report of the Message of the Month Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

OPERATION PACIFIC

The Operation Pacific Committee continued to explore ways in which physicians of the Hawaii Medical Association can become involved in helping meet the medical requirements of the people in the Pacific Basin. Emphasis

was again placed on the islands of the Pacific, notably American Samoa and the Trust Territories, where the needs are great and where the people of Hawaii have come to look upon as areas of special concern.

An opportunity presented itself in June, 1970, when a request came from American Samoa for physicians of various specialties to spend three or more weeks in the hospital and outpatient clinics. A call for volunteers was sent out to members of the Hawaii Medical Association and arrangements made in sending several physicians during the summer months. Returning physicians reported that their stay in American Samoa was rewarding both from the point of view of personal experience and their satisfaction in providing a useful service. They recommended that HMA continue to endorse such short term visits but that attempts be made to coordinate recruiting efforts through the office of the Governor of American Samoa so that HMA members be given sufficient time to make necessary arrangements for the trip and avoid unnecessary delays and cancellations.

Reports on American Samoa and the Trust Territories were made to the committee by HMA members and invited guests. A recurring theme was the need for continuing training of medical personnel, especially the medical practitioners who bear the full responsibility of physicians but do not have the degree of Medical Doctor. The medical practitioners are sensitive to this difference and would very much like to be regarded with the respect commensurate with their responsibilities. A particularly sore point is that when invited to Hawaii for medical training, they are often treated like orderlies. HMA was urged to make some organized effort to give the medical practitioners who come here as observers more recognition and a greater opportunity to observe the doctors of Hawaii in their hospitals, clinics, and offices on a more equal footing.

The Operation Pacific Committee again had at its disposal donated medical supplies and equipment for distribution to deserving areas of the Pacific. The problems encountered in packaging, transportation, customs regulations, storage and effective utilization at times seemed insurmountable. The committee gained the impression that the Pacific islands should not be regarded as a depository of unwanted and obsolete medical supplies, and that before being collected there should be some indication that the supplies are needed and can be effectively utilized. Further assurance is needed that the supplies can be properly stored at their destination and do not compete with existing suppliers or be placed at the disposal of profiteers.

RECOMMENDATION: The committee felt that while HMA's efforts to be of assistance to the developing communities of the Pacific islands were still rudimentary, there was unlimited potential for greater service and that it should continue its endeavor.

GEORGE SUZUKI, M.D.

Operation Pacific

Your Reference Committee next considered the report of the Operation Pacific Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

HEALTH MANPOWER

This committee was assigned to the Public and Inter-professional Relations Commission. Its members have not yet been named.

Health Manpower

Your Reference Committee next considered the report of the Health Manpower Committee. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PUBLIC RELATIONS COUNSEL

Mr. Hugh Lytle retired February 28. No successor has been named.

Public Relations Counsel

Your Reference Committee next considered the report of the Public Relations Counsel. Your committee noted that no report of the Public Relations Counsel was submitted due to the retirement of Mr. Hugh Lytle. Your committee has no recommendations to make.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PUBLIC RELATIONS

Since we are obviously affected by decisions involving medical and health matters in the community, we *must* then be involved in the decision-making process. This does not mean that we would make the decision itself, but it does mean the expression of our opinions, reactions, and suggestions *before*, not *after* the fact.

The following is a resumé of the more important activities of this committee:

1. There is a great need to get through to opinion leaders who direct the fundamental forces behind the tremendous growth and demand for health services. On July 1, 1969, a fruitful panel discussion with four top labor leaders was held on cost and delivery of medical services.

2. The importance of taking a balanced approach to all changes taking place in the health care system was considered. On August 12, 1969, a provocative panel discussion with four representatives of the management industry was held.

3. In order to continue to improve communication and information flow activities within the Association to its member physicians the column, "Inside HMA," was started in the September-October issue of the HAWAII MEDICAL JOURNAL.

4. To promote a better relationship and communications with allied health organizations, they were invited to send representatives to sit in on the committee's monthly meetings.

5. To further explore the potentialities of reaching the opinion leaders of the community, an enlightening panel discussion with representatives from the communications media was held on September 30, 1969.

6. To help present organized medicine's views, problems, and efforts on behalf of the community in regard to health care cost, teams of medical speakers were formed. One appearance was on the "Medically Speaking . . ." television program and another was in a press conference held on April 4, 1970.

7. The committee affirmed the AMA position that "medical care is a right rather than a privilege" as a policy of HMA, and the Council approved this stand.

8. The committee is in the process of laying the groundwork for a panel discussion on allied health personnel jointly with Honolulu County Medical Society.

9. The committee is also developing a questionnaire to survey the members on HMA's strength and weaknesses.

RECOMMENDATIONS: (1) The committee should continue to explore new programs and innovate ideas to catch the imagination and enthusiasm of Association members and the community at large. (2) The committee should establish a continuing and active interaction on common projects with the committees of the Hawaii Nurses Association, Hospital Association of Hawaii, Hawaii Dental Association, and our Woman's Auxiliary. (3) Programs should be planned and carried out with attention to their publicity potential; that is, medical edu-

education, health care costs, and community health planning, thus projecting to the public the efforts of HMA in these field. (4) A task force should be established to study the future of organized medicine and the Association in order that we may be more socially and politically responsive. The Association should take steps to determine where it is today, and where it is going, by in depth looking at such areas as the physician-patient relationship, changing relationship with government, and relationship with allied health associations. (5) The committee should continue with an active health care costs speakers bureau to project the image of HMA to the community and to improve the quality of the speakers with a speech training seminar. (6) The HMA should encourage its members to participate and take leadership in community affairs involving health care cost, health manpower, medical education, and availability of health care. (7) The HMA should commend Mr. Hugh Lytle, Miss Lee McCaslin, Dr. Henry Yokoyama, and Dr. George Mills for fostering the good image of organized medicine.

BUDGET REQUEST:	
Conference Expense	\$ 550.00
Public Relations Council	6,000.00*
Newspaper Advertisement	100.00
Miscellaneous Flyers	170.00
Printing	50.00
Hospitality Expense	200.00
Miscellaneous	100.00
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TOTAL	\$7,170.00
 CESAR B. DEJESUS, M.D.	

* Reduced by House of Delegates from \$6,000.00 to \$4,400.00.

Public Relations

Your Reference Committee next considered the report of the Public Relations Committee. A full and complete discussion of the subject was had. Your committee recommends that the word "commitments" in Recommendation No. 2 be changed to read "committee." Your committee further recommends that Recommendation No. 3 be reworded as follows: "Any programs planned should be evaluated as to its publicity potential." Your committee further recommends that the word "its" under Recommendation No. 6 be changed to read "more." Your committee further recommends that the word "fostering" under Recommendation No. 7 be changed to read "continuing." Your committee further recommends a decrease in the second item of the budget from \$6,000 to \$4,400. Your committee recommends approval of the report as amended.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

TV-RADIO

The members of this committee have continued to produce "Medically Speaking . . ." as a community service and as an effort of medicine to communicate with the lay public.

Several innovations were made that were felt to be improvements: (1) A deliberate attempt was made to relate medicine to the community's health and social problems. This was accomplished by the selection of programs and by the frequent participation of nonphysician panelists. (2) The program's introduction was altered to freshen the pace. (3) Critique sessions were held during the summer and holiday breaks. (4) A taped program on heart transplantation was presented using a distinguished panel and the University of Hawaii's medical students. (5) A neighbor island physician was flown in to participate on a panel when interest in an all-neighbor island program lagged. (6) The program schedule was sent to the Department of Education as part of ETV's Special Program Bulletin.

Mr. Gordon Burke has continued to moderate in his relaxed style. Mr. Hugh Lytle, "Question Central," retired in February after 8 years of service to the program. Hugh, after innovating the program, nurtured it from its infancy to its present mature self. Bert Darr has competently filled the void in "Question Central." Nick Carter, director of "Medically Speaking . . .," resigned from KHET-TV for greener pastures but remains until May as its director. His clever ideas, happy disposition, and hirsute countenance will be greatly missed—in that order.

RECOMMENDATIONS: (1) That HMA continue ads in the Sunday T.V. Guide. (2) That neighbor island physicians be encouraged to participate on "Medically Speaking . . .," and that HMA reimburse them for their transportation and lodging. (3) That taped programs and off-studio locations be considered when unique and worthwhile opportunities are presented. (4) That Mr. Hugh Lytle be recognized and commended for his tireless efforts on behalf of "Medically Speaking . . ." and HMA.

BUDGET REQUEST:	
Weekly salary for Gordon Burke at \$40.00	
A program based on 40 weeks.....	\$1,600.00
Weekly salary for Bert Darr at \$40.00	
A program based on 40 weeks.....	1,600.00
Miscellaneous	100.00
Refreshments for panelists @ \$5.00	
per program	200.00
Sunday ads	440.00
Transportation	300.00
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TOTAL.....	\$4,240.00

Television-Radio

Your Reference Committee next considered the report of the Television-Radio Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:
The Chairman moved adoption of this portion of the report. It was adopted.

PRESIDENT, WOMAN'S AUXILIARY

"Find a group of people who are going somewhere and get in front of them." In assuming the position of president, I have done that and this report reflects the achievements and talents of a group of doctors' wives, who have directed their energies assisting the Hawaii Medical Association toward achieving better health conditions by developing projects and programs to meet the health needs of the community.

Knowledge and inspiration for many projects was aided by training programs for State Officers and Committee Chairmen at educational and goal-setting workshops and conferences put on by our National Auxiliary in Chicago and Arizona. In addition, resource materials of every nature and 10 package programs on topics, such as Drug Abuse are prepared and made available to us by our National Auxiliary. This exposure to the National training programs inspire individual chairman so that a new challenge is transmitted to her component auxiliary chairmen. Our State Auxiliary models workshops and a conference after our National program to help our component auxiliaries evaluate projects for their communities.

The GEMS program, a baby-sitting course suggested as a National Auxiliary program, was held at Mabel Smyth auditorium. The course consisted of 6 hours of instruction and training and attracted over 200 young people and adults. Two other groups have since sponsored courses using our material and guidance. This program will be continued on Oahu and to outlying areas this year.

Another phase of our Safety Disaster Preparedness program was an organized drive against poisoning during National Poison Prevention Week. Over 14,000 fourth graders throughout the State took home fliers on First

Aid Treatment for Poisons and Parents Safety Questionnaire. Over 775 kindergarten children were given Locked Up Poison pamphlets to take home. All television and radio stations made public service announcements. The "Pau Hana Years" program had a 12 minute interview and talk with an Auxiliary member on Look Alikes We Live With. Dr. Richard Ho, director of the Honolulu Poison Control Center spoke at elementary schools on poison prevention. Home delivery customers of Meadow Gold Dairies were given copies of First Aid Treatment for Poisons. Posters were put in super markets, pharmacies, health centers and libraries. Over 110 students competed in a poster contest, which were later displayed in a shopping center. "Message of the Month" published in the TV guide cautioned against poisonous plants.

Achievements of the Safety Committee for last year were given National recognition at the National AMA Convention in July. The Oahu Auxiliary received the National Emergency Health Service Award.

The Oahu Auxiliary co-ordinated a "Guest Day Worry-In Clinic" for women civic leaders. Guest Day is a successful format used to educate civic leaders in the community about a pertinent medical topic, in hopes that they may use the information in their organizations. Over 200 doctors' wives and guests attended. A panel of 5 doctors and a minister conducted the workshops. The success of the program showed in the excellent press reaction and requests for repeat programs.

AMA-ERF completed the 1969-70 fund raising year with a spectacular dinner-auction, "Hawaiian Mania," sponsored by the Oahu Auxiliary, which drew a crowd of over 500 and cleared over \$5,000. The money will go to the University of Hawaii Medical School. Additional funds were raised at their Christmas luncheon and by the sale of hand-made Christmas ornaments. Kauai's "candy sale" project netted \$75.00 and Maui contributed \$50.00. Funds are continually derived from the sale of AMA-ERF note-papers, Christmas cards and assorted objects. A total of \$2,625.45 will be presented to the University of Hawaii School of Medicine at the State Convention in May as funds received during the calendar year, 1969.

Community service activities involve every member in the State, who is active in any health-oriented program or organization. This is encouraged by the Auxiliary whether or not the Auxiliary sponsors the project. Specifically, the Auxiliary helped with blood bank donor drives, diabetic detection centers, glaucoma clinics, and immunizations programs. The Oahu ladies are driving a bus for the Cancer Society to community centers where information on cancer is distributed to the public. Copies of Today's Health and Today's Health Guide are sent to high school and college libraries. Kauai Auxiliary contributes annually to "Project Hope" and sponsored a successful "Hearts and Husband" program. Schools continue to use "Poisons Go Hawaiian" slides and the Military have made many copies for their permanent use.

Sixteen new biographies, 13 revisions and 5 photographs were added to the "In Memoriam—Doctors of Hawaii," making a grand total of 452 biographies and 253 photographs.

The publicity coverage of all Auxiliary events was outstanding this year. There were many full page columns with pictures describing in detail the aims of our programs.

The State Legislation Chairman keeps up to date on pending legislation in Hawaii, but feels the Auxiliary could be of more help to the HMA if we were asked to participate in their legislative activities.

Our Woman's Auxiliary of the Students to the AMA chairman reports that efforts to organize a chapter for medical students/interns/residents' wives as yet is without success. But the Auxiliary keeps an up-to-date list of all these students, and their wives are invited to attend Auxiliary functions. We contribute \$5.00 to the National organization.

The Woman's Auxiliary assisted the HMA in organizing a grand scale "Careers Day," enlisting the aid of some 20 paramedical organizations for the first time. There

was excellent cooperation with the Board of Education. Over 2,000 students witnessed a "Careers Day," as compared to the 90 students who participated last year. The Board of Education is seriously considering instituting a special course in "Careers" within the next two years.

International Health is a very active committee in the Oahu Auxiliary. Last August, 12 tons of drugs and supplies were sent to Vietnam. The committee now co-operates with National Project Concern and are sending collected Drugs to San Diego for further distribution.

The Council of the HMA has expressed an unanimous agreement for an increased appropriation in dues to the Woman's Auxiliary to the HMA in the amount of \$2.00 per member, so that we may meet the obligations of our budget. With this increase the total amount realized for each member will be \$8.00 (\$4.00, of which goes to the National Auxiliary to the AMA for dues). This will be just enough to cover our operating budget for the year 1970-71. Grateful acknowledgment is made to the HMA for their financial support, which provides the Auxiliary the means to aggressively carry out these programs.

Certainly the high point of this year is the report just in from Hilo, that the Big Island Woman's Auxiliary has voted to rejoin the State Auxiliary after a lapse of many years. Our warmest congratulations to them and a sincere welcome back.

The State Auxiliary can claim a 100% membership (789) and 100% organized County Auxiliaries. This is a unique situation in our 50 States.

RECOMMENDATIONS: (1) The Auxiliary legislative chairman be invited by the HMA legislative committee to attend legislative committee meetings from time to time. (2) The policy instituted this year of having the President of the Woman's Auxiliary attend the Council meetings be continued. (3) That the \$2.00 dues increase voted for by the Council be passed.

MRS. CLIFFORD F. MORAN

President, Woman's Auxiliary

Your Reference Committee next considered the report of the President of the Woman's Auxiliary to the HMA. A full and complete discussion of the subject was had. Your committee recommends that Recommendation No. 1 be amended to read as follows: "The Auxiliary legislative chairman be appointed as a nonvoting ex officio member to the HMA legislative committee." Your committee further recommends that the Woman's Auxiliary be commended for their outstanding achievements. Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AWARDS & SPECIAL PROJECTS

The committee had one meeting this year on December 8, 1969, to discuss the Hawaiian Science Fair and nominations for the Robins Award.

Hawaiian Science Fair: The Hawaiian Science Fair was held April 2-5, 1970, at the Honolulu International Center. The HMA supported this Fair and extended six awards of \$15 each. The judges representing the HMA were Drs. William J. Holmes and Jared B. Morris. The recipients of these awards are as follows:

"The Relationship between the Cholesterol Triglycerin and Beta-lipoprotein levels in Human Blood"—Stephen S. Yano, St. Louis High School

"The Extent of Fecal Contamination in the Waiolani-Nuuanu Stream"—Karen Tenno, McKinley High School

"Incidence of Lymphocyte Antigens"—Wayne M. Yokoyama, Aiea High School

"How do Different Solutions Affect the Growth of Wheat"—Regina Franks, Waialua High and Intermediate School

"Maui's Untreated Water"—Audrey Azeka and Amy Kwon, Kahului High School (Maui)
"Cytology of Fish Eyes"—Sarah Kahalewai, Samuellette Naihe, Valerie Siangco, Kaunakakai High School (Molokai)

The committee is continuing its association with the Inter-Society Science Education Council (ISSEC) of the Hawaiian Academy of Science and Associated Societies, and your chairman is the HMA representative.

Robius Award: At this meeting, the Robins Award winner was chosen.

BUDGET REQUEST:

Prizes	\$ 90.00
Contribution	100.00
TOTAL	\$190.00

ROBERT A. NORDYKE, M.D.

Awards and Special Projects

Your Reference Committee next considered the report of the Awards and Special Projects Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

NURSES LIAISON

The Nurses Liaison Committee of the Hawaii Medical Association includes members from the nursing profession. Regularly invited guests include representatives from the Hawaii Nurses Association, Hawaii Hospital Association, Hawaii League for Nursing and the University of Hawaii School of Nursing. It had been hoped that this committee would continue to provide a forum in which members of our State Medical Association could relate with the nursing profession in the sharing and solution of problems pertaining to better patient care, relations with hospital and physicians, nursing legislation and nursing education.

Two meetings of the committee were held during the year 1969-1970. At the initial meeting of October 23, 1969, the committee dealt further into the problems attendant to nurses prescribing medications in various medical facilities throughout the State; however, no constructive solutions were forthcoming. Members were brought up to date on the research project being conducted by the University concerning delineation of roles of different types of RNs and brief consideration of the directions of nursing education locally were aired.

At the meeting of November 20, numerous invitees joined with members of the committee in a free-wheeling discussion involving allied health personnel in general, their classification, utilization, regulation and career mobility. As a result of this meeting further activity of this committee was suspended pending further direction from the council and the president of the Hawaii Medical Association.

Despite the local inactivity, there have been major developments on the national scene within the very recent past and interested physicians and the nurses have expressed a desire to continue joint discussions in future meetings of a committee of this type. Whether or not the Nurses Liaison Committee will continue to remain as a standing committee or be incorporated into a larger structure dealing with allied health personnel remains to be seen.

RECOMMENDATION: (1) A Hawaii Medical Association committee composed of physicians, representatives of organized nursing, as well as of related allied health fields, be established to promote joint discussions and action.

H. H. CHUN, M.D.

Nurses Liaison

Your Reference Committee next considered the report of the Nurses Liaison Committee. A full and complete discussion of the subject was had. Your committee recommends that its recommendation be deleted. Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

PUBLICATIONS

The Publications Committee functioned primarily in an advisory capacity to the Editor of the HAWAII MEDICAL JOURNAL but several policy matters were undertaken. The following major actions were taken besides other minor housekeeping chores related to manuscripts for publication:

(1) It is desirable, whenever appropriate, to use proper author bylines.

(2) The HMA should not become involved in the California Medical Association's project for multi-state joint publication of state journals at this time.

(3) The AMA guide and advice was solicited in the matter of commercial laboratory advertisement in the HAWAII MEDICAL JOURNAL. This matter was referred to the Council for a decision.

RECOMMENDATIONS: (1) That the committee assume a more active role in HMA publications. (2) That the committee review and make revisions of the publications program of HMA.

RICHARD T. MAMIYA, M.D.

Publications

Your Reference Committee next considered the report of the Publications Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON INTERPROFESSIONAL AND PUBLIC RELATIONS

This is a brief summary report on the above Commission:

Association of Professions: This committee has been exploring possibilities with other professions to form an association. There are many pros and cons to this formation and the committee in the past has been unable to bring to fruition anything about this. This committee should be given another year since there are some expressions by other professions that they would like to join. At the end of one year, a firm decision must be made whether to form this association, or to disband the committee.

Careers: This committee was very active during the last year. A Health Careers Day was held at the Honolulu Center which was very well received by the Department of Education and by the students. There is increased need and interest in medical careers. The formation of some type of medical careers council is felt necessary but doubt that the Hawaii Medical Association has the resources to undertake this under its auspices. At the present time explorations are being made to see if this can be done. It is felt that this probably will have to be an independent council, with members from HMA. The Association definitely should continue its aggressive work in this field.

Disaster: An excellent disaster drill was held this year. The Association should continue to plan for these.

Filipino Speakers Bureau: This committee had a difficult time moving forward into radio and television pro-

grams. It is hoped that they will be able to do so more in the future.

Japanese Speakers Bureau: An excellent job was done by this group in the Japanese language radio stations. There is some desire within the committee to have television programs in the Japanese language and this should be encouraged.

Message of the Month: The format of the Message of the Month was changed beginning October 1, 1969, and the message is inserted in the Sunday newspapers as an advertisement. It is felt that this change will reach more people through the newspapers than it did in the past. It is recommended that this committee be merged with the TV-Radio Committee.

Medicine and Religion Committee was very active this year. More and more ministers are showing an interest in medical subjects, and the physicians need to do likewise.

News Media: With the initiation of direct physician news writer contacts, the committee was able to get much better cooperation with the news media. The committee is working on a code of cooperation and is exploring the possibilities of a combined code with the hospitals.

Nurses Liaison: This committee is an extremely important one but should be merged with some committee which has more overall view of the various health professions.

Operation Pacific: The committee did an excellent job with the vast amounts of government money being poured into the Pacific basin. It is difficult to be sure what is expected of voluntary physicians concerned with health care in this area. They definitely need more and more physician training and orientation and the committee is doing an excellent job.

Public Relations: This committee was very active in continuing to try to improve the doctor/public relationship. It is important that other committees consider the public relations impact of their programs and let the Public Relations Committee assist them in any way possible.

Quackery: This committee has been active and continues to meet with responsible individuals regarding suppression of quackery.

Television-Radio Committee is doing an excellent job and should be congratulated.

The Woman's Auxiliary has been very helpful to our organization during this year and is to be thanked.

RECOMMENDATIONS: (1) That the Association of Professions be given a one-year mandate to come up with a definite proposal or to disband. (2) For the consideration of a career, a health careers council be considered. (3) That the Disaster Committee be merged with the County Disaster Committee. (4) That the Message of the Month be merged with TV-Radio Committee. (5) That the Nurses Liaison Committee be merged into a larger committee for all health professions. (6) That all committees in the HMA consider the public relations aspect of their actions and utilize the Public Relations Committee in a consultative way.

BUDGET: The Association must consider in their budget for the coming year the need of sending a representative to the Public Relations meetings in Chicago and also somebody to the Medicine and Religion meetings.

The consumer, news media, labor, and management are all vitally interested in medical affairs. It is the duty of all physicians of HMA to get involved and voice their opinions and desires before it is too late to be heard. The wheels of progress in our society move slowly and only after a lot of spinning but, if everyone is involved, it certainly will move more in the direction that we desire.

H. WILLIAM GOEBERT, JR., M.D.

Commission on Interprofessional and Public Relations

Your Reference Committee next considered the report of the Commission on Interprofessional and Public Relations. A full and complete discussion of the subject was

had. Your committee recommends that paragraph 8 be reworded to read as follows: "Medicine and Religion Committee was very active this year. More and more ministers are showing an interest in our mutual problems and the physicians need to do likewise." Your committee further recommends that Recommendation No. 2 be reworded to read: "That a health careers council be established." Your committee further recommends that Recommendation No. 3 be reworded to read: "That the HMA Disaster Committee investigate the possibility of coordinating its efforts with the HCMS Disaster Committee and Hospital Disaster Committees for optimum utilization of medical personnel. Your committee further recommends adding "specifically the new Health Manpower Committee" to the end of Recommendation No. 5. Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

COMMISSION ON INTERNAL AFFAIRS

The Ad Hoc Search Committee did not find it necessary to hold any meetings during the past year because of the employment of Peat, Marwick, Mitchell & Company to study the organizational structure of the HMA. This organizational study was mandated by the House of Delegates. The chairman of the committee has recommended that the committee be dissolved and that another committee be established to implement the Peat, Marwick & Mitchell report and to work on the reorganization of the HMA.

The Hawaiian Science Fair was held at the Honolulu International Center April 2-5, 1970. The HMA once again contributed \$100 to the Hawaii Academy of Science and once again awarded six \$15.00 prizes for science projects of the Hawaiian Science Fair. Judges representing the HMA from the Awards & Special Projects Committee were Drs. Wm. J. Holmes and Jared Brett Morris.

The Robins Award recipient was selected whose name will be revealed at the annual banquet on May 9, 1970. Once again the committee did not nominate anyone for the Lane Bryant Award.

The Bylaws & Parliamentary Committee had the difficult task of preparing the many revisions, rephrasing, and additions to the Bylaws which is being presented to the House of Delegates. Chapter VIII of the Bylaws was not altered at this time due to the reorganizational study currently in progress.

The Arrangements Committee again functioned most efficiently under the seasoned chairmanship of Dr. R. Varian Sloan. The chairmen of the various social and sport events of the annual meeting completed most of the preparations needed in advance and had no major obstacle to hurdle. For the first time, the committee asked two representatives of the Medical Service Representatives of Hawaii to serve on the committee as consultants. These two representatives have been of great assistance to the HMA in planning for the annual meeting.

In recognition of the multifold contribution of the pharmaceutical representatives to our annual meeting each year, Dr. George H. Mills, President of the HMA, has generously donated a perpetual trophy on which the name of the low-net winner of the Medical Service Representative participating in the HMA annual golf tournament will be inscribed. A small replica of the bowl is also being donated this year by Dr. Mills for the winner to keep and his name will be inscribed on it. The HMA will provide the replica of the bowl from 1971.

The chairman of the Scientific Program Committee clearly laid out the objectives of each monthly meeting so that within six months 90 percent of the program was completed. The committee should again utilize the

structured course of plan in order to accomplish the objectives with expediency.

Arrangements for the operation of the scientific meeting of 1970, are being coordinated with the Conference Center of the University of Hawaii. This is the first year that the HMA has contracted this organization and if proved successful, the HMA should continue its relations with them for future meetings. The Conference Center offers the following services: (1) assist the planning committee in the coordination of the program and arrangements for the physical facilities required; (2) arrange for all printing services required and advise on design; (3) administer all matters pertaining to pre-registration and registration at the door; (4) administer the budget, issue purchase orders, pay all bills and render a final financial accounting of the program; (5) provide audio-visual services as required for the program; (6) provide supervision and assistance during the program; (7) coordinate travel and hotel requirements; (8) develop conference materials, announcement brochures, registration forms, programs, name tags, conference kits, and other conference materials as required; and (9) assist in designing a conference evaluation form, if desired. If used, assist in the tabulation of the results and the evaluation of the program in terms of meeting the program objectives. Although the HMA is handling all arrangements for the social activities, the Conference Center is equipped to assist in planning the social activities of the annual meeting. The HMA's financial obligations to the Conference Center are for the actual costs of materials and clerical services. The HMA does not pay for any professional service extended by the Conference Center.

The Ad Hoc Committee to Coordinate the AMA Clinical Session has not had any meetings. Refer to the committee's report for more details.

RECOMMENDATIONS: (1) That the HMA continue its working relationship with the Conference Center of the University of Hawaii for the 1971 annual meeting. (2) That additional members be added to the Arrangements Committee in order to relieve the same physicians from assuming the task from year to year, e.g., that co-chairmen be selected for each social or sporting event in order that there will be continuity in carrying out programs more efficiently through familiarity and experience. (3) That selection and confirmation in writing of all locations and dates of all events—banquet, sportsmen's night, golf tournament, etc.—should, if possible, be made at least 9-12 months prior to the on-coming HMA meeting. (4) That the Treasurer include in his budget the cost of a Monkey Pod Bowl replica of the George H. Mills perpetual trophy and inscription of the name. (5) That the exhibitors of the HMA annual meeting be invited to participate in the golf tournament annually. In the event this group cannot be accommodated on the same course and on the same date, the golf committee should work out another date and place with the medical service representative golf chairman. (6) That Dr. George H. Mills be commended for his generous donation of the perpetual trophy to the medical service representatives in recognition of their contribution to the HMA annual meeting. (7) That the chairman of the scientific program committee utilize the structured course of plan for his committee in order to accomplish his objectives with expediency, and that a similar timetable should be prepared as soon as possible in order that the committee will have current knowledge of the progress of planning and can be prepared adequately for each meeting. (8) That the theme of the succeeding year should be selected by the Scientific Program Committee and approved by the Council by January of each year. (9) That upon selection of the theme of the succeeding annual meeting, the chairman for the following year should begin formulating his committee with the President-elect.

COOLIDGE S. WAKAI, M.D.

Commission on Internal Affairs

Your Reference Committee next considered the report of the Commission on Internal Affairs. A full and complete discussion of the subject was had. Your Committee recommends that Recommendation No. 4 be reworded to read as follows: "That the Treasurer include in his budget no more than \$20.00 to cover the cost of a Monkey Pod Bowl replica of the George H. Mills perpetual trophy and inscription of the name." Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

JAPANESE SPEAKERS BUREAU

The Japanese Speakers Bureau met several times earlier in the year to discuss the projects for the year. With sixteen new members now available, it was decided to divide the members into Team A (the original members) and Team B (the newer members). Team A rotated regularly on the KOHO Monday evening program and Team B members were on call. As it turned out, Team B members were called as often as those on the regular Monday program. The medical programs on Station KOHO continued to enjoy its popularity because of the anonymity of the caller and the wide range of subjects covered. The Tuesday afternoon program on KZOO was terminated in November when the station changed its format. The possibility of a TV program on KIKU was investigated by Chairman Dr. Akagi and was started in November on a once monthly basis. Two members usually comprise the panel and two more members take the incoming phone calls which are screened and given to the panelists. The response to this program has been overwhelming judging from the number of calls and the responses of viewers. It is an hour long program on the first Thursday of each month from 8:00 to 9:00 p.m. and is usually moderated by a Mrs. Oki, but on occasion, when she was not available, Dr. Akagi has served with exceptional skill. Team A members include Noboru Akagi, Henry Yokoyama, Naomitsu Tajima, Shigeo Natori, Kazushi Tanaka, Takakazu Fukumura, and Keichi Goshi. Team B members are Mitsuo Hattori, Harry Nakata, Richard Sakimoto, Emiko Sakurai, Fumiyo Sugimoto, Yoshiki Ushiyama, Tatsuo Watanabe and Tsuyoshi Yamashita. These members have served willingly and with exceptional dedication over the years.

Submitted by Vice Chairman, HENRY YOKOYAMA, M.D.

Japanese Speakers Bureau

Your Reference Committee next considered the report of the Japanese Speakers Bureau. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

ARRANGEMENTS

This committee met on numerous occasions. With the meeting being in Honolulu this year, most of the arrangements were made early in the year 1969. Mrs. Heather Akana was appointed Coordinator of the Convention and has worked with Mr. Harold P. Brown of the Conference Center of the University of Hawaii since the Council voted to utilize its services. This organization will be directly responsible to the Scientific Program Committee and has assisted the HMA in planning for the meeting. The meetings will be held in the Coral Ballroom of the Hilton Hawaiian Village. The House of Delegates will also hold its sessions in those rooms.

Breakfasts will not be catered this year as there are many fine restaurants at the Hilton Hawaiian Village to which the participants at the Convention may be served before the meetings.

Exhibits: This year, the pharmaceutical companies, voluntary health agencies, and other organizations bring the total number of exhibits up to 52. The exhibit hall is adjacent to the Coral Ballroom and methods of encouraging the registrants to view the exhibits will be made by routing them through the exhibit hall and into the meeting rooms.

Fishing and Tennis: As usual, these events will be held before the week of the annual meeting and prizes will be awarded at the Sportsmen's Night dinner.

Golf: The golf tournament will be held at the Mid-Pacific Country Club and the pharmaceutical representatives (exhibiting at the annual meeting) and visiting doctors have been invited to participate.

Sportsmen's Night: This function will be held at the Mid-Pacific Country Club following the golf tournament. Prizes for all three sporting events will be distributed at that time.

Banquet: The banquet will be held at the Shriner's Country Home in Waimanalo and will be catered by the Shrine group. Cocktails, dinner and entertainment are included in the per capita cost. All proceeds over and above expenses for the banquet will go to the Shriner's Crippled Children Hospital.

Aloha Committee: Host physicians for the guest speakers were arranged by the Scientific Program Committee.

RECOMMENDATIONS: (1) That next year's committee continue to utilize the services of the Conference Center at the University of Hawaii. (2) That no solicitations of pharmaceutical houses be made for prizes for the sporting events, making the entrance fees cover the expenses for prizes for each of the sporting events. (3) That next year's committee start its planning early as was done this year in order to expedite the various functions.

R. VARIAN SLOAN, M.D.

Arrangements Committee

Your Reference Committee next considered the report of the Arrangements Committee. A full and complete discussion of the subject was had. Your committee recommends approval of this report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

AD HOC COMMITTEE TO COORDINATE THE AMA CLINICAL SESSION

There have been no formal meetings of this committee, however, the Secretary has been corresponding with the AMA Convention Office and there is a remote possibility that the 1972 AMA Clinical Session will be held in Hawaii. This was made possible by the fact that the Atlanta, Georgia facilities for the Session have not been completed as yet and Hawaii was asked if it could accommodate this meeting. The final decision will be made by the AMA in June, 1970.

RECOMMENDATION: (1) That the Ad Hoc Committee be continued to pursue future AMA Clinical Sessions in Hawaii if the 1972 meeting does not become a reality.

R. VARIAN SLOAN, M.D.

Ad Hoc Committee to Coordinate the AMA Clinical Session

Your Reference Committee next considered the report of the Ad Hoc Committee to Coordinate the AMA Clinical Session. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

WOMAN'S AUXILIARY

The Woman's Auxiliary Committee had no meetings this past year.

Requests for assistance of the Woman's Auxiliary were directed to the Chairman of the Committee by the HMA office on several occasions, and each time these requests were best and most simply expedited by being relayed directly to the appropriate Woman's Auxiliary Committee Chairman on Oahu instead of the Woman's Auxiliary President on Maui.

RECOMMENDATION: It is suggested that coordination between the HCMS and the HMA to appoint the same members to both the County and State Woman's Auxiliary Committees would create a more flexible, useful and effective committee than the present, separate committees.

JEROME L. TUCKER, M.D.

Woman's Auxiliary

Your Reference Committee next considered the report of the Woman's Auxiliary Committee. A full and complete discussion of the subject was had. Your committee recommends that the recommendation be amended by inserting the word "Honolulu" after the word "same." Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

SCIENTIFIC PROGRAM

A central theme of "Acid-Base, Electrolyte and Water Balance" was chosen for the scientific program for the 114th Annual Meeting.

Prospective speakers for the program were contacted beginning in July of 1969, and by September, commitments were obtained from four of the mainland speakers. Local speakers were also asked to lecture to make a well-rounded program.

An important innovation was made in this year's committee activities in order to improve the overall quality of the annual meeting. The Conference Center of the Division of Continuing Education and Community Services of the University of Hawaii agreed to provide help in coordination of the program and make arrangements for all of the physical facilities. A formal agreement between the Hawaii Medical Association and the Conference Center was approved by the Hawaii Medical Association Council in December of 1969. In addition to the overall assistance in planning, the Conference Center will be responsible for all printing of the programs, providing audiovisual services and to administer the registration procedures at the meeting. The Conference Center will also administer the entire budget and render a final accounting of the fiscal matters of the program. Analysis and evaluation of the program in terms of meeting the program objectives will also be provided by the Conference Center.

Although final evaluation of the value of this new arrangement with the Conference Center cannot be made until after the Annual Meeting, it is anticipated that their services will be of tremendous help in our ongoing efforts to upgrade the quality of future scientific programs of the Annual Meetings.

Grateful acknowledgment is made to the following organizations whose financial assistance made the program possible:

American Cancer Society, Hawaii Division
Bristol Laboratories
Burroughs Wellcome & Co. Inc.

Ciba Pharmaceutical Company
 Eli Lilly and Company
 Hawaii Heart Association
 Hawaii Thoracic Society
 Merck, Sharp, & Dohme Postgraduate Program
 Parke, Davis & Company
 Pathology Associates Medical Laboratories
 E. R. Squibb & Sons, Inc.
 Schering Corporation
 The Upjohn Company
 Travenol Laboratories
 RMP-Hawaii Pediatric Pulmonary Program

Acknowledgment is also made to all of the Hawaii Medical Association members who have graciously accepted to appear on the program as speakers, moderators, and presiding officers.

The Committee has acted favorably on a recommendation of the Chronic Illness and Aging Committee that the central theme for the 1971 meeting be "New Challenges to Chronic Disease." It was agreed that planning for this central theme begin as soon as possible.

RECOMMENDATIONS: (1) That Program planning for the 1971 theme of "New Challenges to Chronic Disease" be initiated as early as possible. (2) That the Committee continue to work closely with the Conference Center and utilize their expertise in convention planning. (3) That the Committee plan for expanding the scope of the scientific program to encourage increased attendance and participation by not only our own members but by our mainland colleagues.

HERBERT UEMURA, M.D.

Scientific Program

Your Reference Committee next considered the report of the Scientific Program Committee. A full and complete discussion of the subject was had. Your committee recommends approval of the report.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

NEWS MEDIA

The News Media Committee continued its policy of active cooperation with the news media. Committee members were assigned to medical reporters and to TV newscasters to aid in channeling news. Medical reporters (Tomi Knaefler and William Helton) were invited to separate monthly meetings and there was a beneficial exchange of ideas (especially after the St. Francis kidney transplant news blackout during which our relation with the press somewhat deteriorated).

There has been no definite progress in the formulation of a Joint Code of Cooperation with the Hospital Association even though it is felt that a Code of Cooperation patterned after the Cleveland Code may be advisable. There is a prevailing opinion that the present HMA Code of Cooperation if updated and if terms were revised may be comprehensive and liberal enough.

The committee feels that the present annual Medical Writer's award (first prize \$150 in cash, a large silver bowl perpetual trophy and a smaller bowl suitably inscribed and the second prize of \$50.00 cash and a plaque) should be extended to include an education division. The following budget is recommended:

Professional Division—First Prize: \$150.00 cash; \$10.00 Plaque; and \$10.00 Engraving of perpetual trophy.
 Second Prize: \$50.00 cash; \$10.00 Plaque.

Educational Division—First Prize: \$25.00 cash; \$2.00 Printing. Second Prize: \$15.00 cash; \$2.00 Printing.
 Total Budget Request: \$274.00.

The committee feels that contestants should not only be from the newspapers, but also from other publications, e.g. The Beacon, The Honolulu Magazine, high school and university papers, etc.

RECOMMENDATIONS: (1) The committee should continue its policy of active cooperation with the news media (including newspapers, radio and TV) with whatever facilities available. (2) The committee should continue the medical journalism as modified. (3) The committee should update the present HMA Code of Cooperation (or continue efforts toward a Joint Code with the Hospital Association). (4) The committee should continue as an active grievance committee to which both reporters and physicians can resort to as the need arises.

Submitted by HENRY N. YOKOYAMA, M.D.

News Media

Your Reference Committee next considered the report of the News Media Committee. A full and complete discussion of the subject was had. Your committee recommends that Recommendation No. 2 be amended by inserting the word "awards" after the word "journalism." Your committee further recommends that Recommendation No. 3 be amended by inserting the phrase "in conjunction with the public relations committees of the HMA and HCMS before the next House of Delegates meeting" after the word "Cooperation." Your committee recommends approval of the report as amended.

ACTION:

The Chairman moved adoption of this portion of the report. It was adopted.

RESOLUTION NO. 2

Your Reference Committee next considered Resolution No. 2 which relates to an invitation to the AMA to hold a Clinical Convention in Honolulu. Your committee recommends that this resolution be adopted.

ACTION:

The Chairman moved that Resolution No. 2 be adopted. It was adopted.

RESOLUTION NO. 2 AS ADOPTED

Re: Invitation to AMA to Hold Clinical Convention in Honolulu.

WHEREAS, The Hawaii Medical Association in 1959 extended its first invitation to the American Medical Association to hold a clinical session in Honolulu; and

WHEREAS, This invitation has been reiterated on several occasions; and

WHEREAS, The American Medical Association advised its House of Delegates that Honolulu does in fact have adequate facilities to accommodate a clinical convention; and

WHEREAS, Hawaii not only has adequate facilities but can offer ideal conditions including unsurpassed weather, unequalled scenery, superb golfing and swimming, and innumerable recreation facilities for the enjoyment of the doctors and their families; and

WHEREAS, A variety of inexpensive modes of trans-Pacific transportation is available; and

WHEREAS, The scientific resources of the State of Hawaii includes a medical school, extensive military medical facilities, one of the oldest health departments in the United States, outstanding acute general and specialty hospitals, and a unique demographic laboratory; and

WHEREAS, The State of Georgia has reluctantly found that it must withdraw its invitation to hold the 1972 AMA Clinical Convention in the City of Atlanta; and

WHEREAS, The members of the Hawaii Medical Association are more than even desirous of entertaining their colleagues from the mainland; therefore, be it

Resolved, That this House of Delegates in session for the HMA's 114th Annual Meeting instruct its Delegate to the American Medical Association to enter this resolution at the 119th Annual Convention of the American Medical Association to be held in Chicago, June 21 to June 25, and to do everything in his power to influence the delegates of that Association to accept the oft-

repeated invitation of the Hawaii Medical Association to hold a convention in Honolulu.

Submitted by GEORGE H. MILLS, M.D.

RESOLUTION NO. 7

Your Reference Committee next considered Resolution No. 7 relating to increased membership of medical societies. Your committee recommends that the last resolved be amended by striking out the word "Director" and inserting the word "Doctor."

ACTION:

The Chairman moved that Resolution No. 7 be adopted. It was adopted.

RESOLUTION NO. 7

Re: Increased Membership of Medical Societies

WHEREAS, It is important that organized medicine present a united front in resolving the problems facing it now and in the visible future, and

WHEREAS, Many physicians are not now a part of organized medicine, and

WHEREAS, The medical students are the doctors of the future, and

WHEREAS, The Honolulu County Medical Society has embarked on a program to study and implement methods of broadening participation through membership by all physicians, now therefore be it

Resolved, That the House of Delegates commend the Honolulu County Medical Society for its action in attempting to increase its membership, and be it further

Resolved, That all county societies be encouraged to increase all categories of their membership, and be it further

Resolved, That the President of the Hawaii Medical Association address a letter to each Medical Doctor in the state not now a member, encouraging him to become a member of his appropriate county society and the HMA.

Submitted by JOHN J. LOWREY, M.D.

ACTION:

The Chairman moved adoption of this report as a whole as amended. It was adopted.

NOMINATING

The Nominating Committee met and submitted to the Council for its February 6 meeting the following slate of nominees which will be presented to the House of Delegates:

President-elect.....Herbert Y. H. Chinn
Secretary.....R. Varian Sloan
Councillor from Hawaii.....Ed. B. Helms
Councillor from Maui.....Wm. E. Iaconetti

All nominees have been contacted and have agreed to serve if elected.

WM. W. L. DANG, M.D.

ACTION:

It was moved and seconded that the report of the Nominating Committee be accepted. It was voted to adopt the report.

Nominations were sought for the Nominating Committee. The following were nominated: Sakae Uehara, James Mitchel, Yonemichi Miyashiro, William W. L. Dang, Reginald C. S. Ho, Max G. Botticelli, Albert Chun-Hoon, and George H. Mills. The nominations were closed and the Secretary was asked to cast a unanimous vote.

The Secretary asked for nominations from the floor for President-elect, Secretary, Councillor from Hawaii, and

Councillor from Maui. No further nominations were offered. All nominations were closed and the Secretary was asked to cast a unanimous vote.

Having been elected President-elect, Dr. Herbert Y. H. Chinn asked to resign as Treasurer. Nominations were asked from the floor for the remainder of his term as Treasurer. Dr. Thomas P. Frissell was nominated. The Secretary was asked to cast a unanimous ballot.

The results of the election were announced as follows:

President-elect.....Herbert Y. H. Chinn
Secretary.....R. Varian Sloan
Treasurer.....Thomas P. Frissell
Councillor from Hawaii.....Ed B. Helms
Councillor from Maui.....William E. Iaconetti

Nominating
Committee.....
Max G. Botticelli
Albert C. K. Chun-Hoon
William W. L. Dang
Reginald C. S. Ho
George H. Mills
James A. Mitchel (Hawaii)
Sakae Uehara (Maui)
Yonemichi Miyashiro (Kauai)

NEW BUSINESS

The President asked if there were any new business to come before the House. The Secretary asked to present Resolutions Nos. 3 and 4 as follows:

RESOLUTION NO. 3

Re: Henry N. Yokoyama, M.D.

WHEREAS, Henry N. Yokoyama, M.D., served faithfully on the Public Relations, News Media, and TV-Radio Committees for many years, and

WHEREAS, He has been innovative and responsive to the needs of the Hawaii Medical Association in regard to our public image, and

WHEREAS, He has given time above and beyond the usual responsibilities of a committee member, and

WHEREAS, He has and is devoting untiring efforts in writing the *News and Notes* column for the HAWAII MEDICAL JOURNAL; now therefore be it

Resolved, That this House of Delegates extend its thanks and sincere appreciation for the time and devoted effort given by Henry N. Yokoyama, M.D. on behalf of the Hawaii Medical Association; and be it further

Resolved, That a copy of this resolution be properly inscribed and presented to Dr. Henry N. Yokoyama.

Presented by the PUBLIC RELATIONS COMMITTEE

ACTION:

It was voted to adopt the resolution unanimously and to send to Dr. Henry N. Yokoyama a duly certified copy of the resolution.

RESOLUTION NO. 4

Re: Commendation of George Goto, M.D.

WHEREAS, Dr. George Goto has given time above and beyond the usual responsibilities of a committee member in preparation of testimony and in his appearances before the Legislature on issues of primary concern to the Hawaii Medical Association, and

WHEREAS, He has demonstrated his willingness to be the spokesman for the HMA on issues that were controversial, and

WHEREAS, Although he has been criticized by individuals he has remained steadfast and has demonstrated the courage of his convictions, and

WHEREAS, His leadership in the 1970 Session of the Legislature was instrumental in successfully enacting legislation for the welfare of women; now therefore be it

Resolved, That this House of Delegates extend its thanks and sincere appreciation for the time and devoted effort given by George Goto, M.D. on behalf of the Hawaii Medical Association; and be it further *Resolved*, That a copy of this resolution be properly inscribed and presented to Dr. George Goto and his family.

Submitted by the LEGISLATIVE COMMITTEE

ACTION:

It was voted to adopt the resolution unanimously and to send to Dr. George Goto a duly certified copy of the resolution.

WORKMEN'S COMPENSATION

Dr. Goebert discussed the Workmen's Compensation hearing that will be held on May 14 and 15 and asked the House of Delegates to consider retaining Mr. Walter Chuck as legal counsel. It was noted that Mr. V. Thomas Rice has already been retained as legal counsel; however, there is a possibility the two attorneys could work together if the Workmen's Compensation Committee desired.

ACTION:

It was moved that the Hawaii Medical Association retain Mr. Walter Chuck as co-counsel in the matter of Workmen's Compensation hearings and that the HMA limit their financial responsibility to \$1,000.00. The motion was defeated for lack of a majority vote.

The meeting adjourned at 5:30 P.M.

R. VARIAN SLOAN, M.D.
Secretary

County
Society News

Maui

The Maui County Medical Society meeting was called to order by Dr. Uehara on Tuesday, May 19, 1970 at the Landing in Kahului. Members present: Drs. Achong, Allred, Burden, Dietrich, Fu, Haling, Iaconetti, Izumi, McCollum, McDonald, Moran, Percy, Rossberg, Sowers, Uehara, Underwood, Wallis, Withers and Wong.

A report of the Shigella Clinics was then distributed. It was noted that the breakdown of results was weekly from April 5 to May 14 and included the public clinics and also the private medical clinics. Total positive results for this time period was 75 cases.

The Rubella Immunization for pre-school children was then announced. There were 22 postcard replies with 16 volunteering participation. There was a request for 1,040 total doses. Although this program was to continue for two months, the vaccine will not be available after this period.

New Business: It was reported that the Workmen's Compensation hearing was to be held on May 26, 1970 at 9:00 A.M. at the State Building Conference Room. The prerequisites for the hearing were then announced and after a discussion, Drs. Iaconetti, McDonald, Percy and Moran volunteered to attend the hearings.


The Maui Economic Opportunity Office requested the Society to consider offering pre-employment physical examinations and also starting a clinic on planned parenthood.

HMA reports from the delegates were then made by Drs. Uehara, Sowers and Iaconetti.

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Hawaii

The June 17 meeting was called to order at 7:45 P.M. by Dr. Bracher, president. Members present were Drs. Batchelder, Bracher, Loo, Oio, Steuermann, Spies, Takase, and Wipperman. Guest speakers were Dr. Donald F. B. Char, Honolulu, and Dr. Michihiro Miyanishi, Hiroshima, Japan.

Dr. Char, Director, Student Health Service, University of Hawaii, discussed the future of the student health services on the three University of Hawaii Hilo Campuses.

Dr. Miyanishi was then introduced to discuss the research project that is being conducted here under the sponsorship of the Hiroshima University School of Medicine. In summary, the project is "A Study on the Effect of Environmental Factors on Health, Development of Disorders and Causes of Death in Japanese-American Residents of the Island of Hawaii as Compared with their Relatives Living in Hiroshima Prefecture."

During the business meeting Dr. Edward Ballerini's application for membership was approved. A thank you letter from Mrs. Miyamoto was read by Dr. Bracher. Reports were given on:

- a. The public hearing on Workmen's Compensation rate attended by Drs. Bracher and Batchelder.
- b. The recent Diabetes Screening Survey sponsored by the Lions' Clubs, Department of Health and the HCMS.
- c. The card survey conducted re a meeting of the Society other than in Hilo. A vote of 19 to 9 against.

Dr. Bracher was presented with a picture of himself and Mrs. Bracher taken upon the occasion of being awarded the Robbins Award.

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Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 451, from *Arch. Int. Med.* (Feb.) 1970.

(1) FALSE

"Patients were selected for this study on the basis of (1) clinical findings consistent with the diagnosis of pulmonary embolism and (2) lung scans which showed perfusion defects characteristic of emboli. The findings in this group of patients emphasized that pulmonary embolism did not produce definitive or "classic" clinical manifestations. The diagnosis was often established on the basis of a variety of suggestive signs, symptoms, and laboratory results as well as the clinician's awareness of the patient's susceptibility to emboli.

"Dyspnea was reported in only 60% of our patients. This is in contrast to the data reported in Sasahar's series of embolus patients where it occurred in 100% of the cases. This difference may be due in part to the large number of patients with heart disease and chronic lung disease in the latter study." (p. 246, col. 2, para. 2)

(2) FALSE

"It is apparent from this study that the usual pulmonary embolus resolves rather rapidly and often completely. Although patients with smaller emboli (<15% defect) are more likely to have normal perfusion restored, 90% of the 22 patients with large perfusion defects (>30%; average size, 44%) recovered at least one half of the perfusion loss and 20% did return to normal." (p. 246, col. 3, para. 3)

(3) TRUE

"Two other factors, the patient's age and the presence of heart disease, were more obviously related to the rate and degree of return of blood flow after an embolus. Our observations on the relatively poor resolution patients with heart disease are similar to those of Chait and associates who found complete resolution of pulmonary emboli in only one of 13 patients with cardiac disease who were studied by arteriography, surgery, or necropsy up to two years following the initial embolus. Similarly, poor resolution was seen in patients more than age 60." (p. 246-247, col. 3, para. 4)

EDITOR'S NOTE: The authors state that all patients in this study were treated with heparin one to three weeks after the diagnosis of pulmonary embolism was made. With this program three-fourths of the patients recovered a significant portion of lung perfusion.

(4) FALSE

"The relationship between hemodynamic abnormalities and the clinical course of mitral stenosis has been clearly defined. With appropriate degrees of mitral valvular stenosis, left atrial, pulmonary venous, and pulmonary capillary pressures rise. When pulmonary capillary hypertension is severe, there is fluid movement from the pulmonary capillary bed, which produces interstitial and ultimately alveolar pulmonary edema with consequent abnormalities of pulmonary mechanics and gas exchange. Although the primary abnormality involves the heart, the patient's clinical manifestations are mediated through abnormalities of lung function." (p. 248, col. 1, para. 1)

(5) TRUE

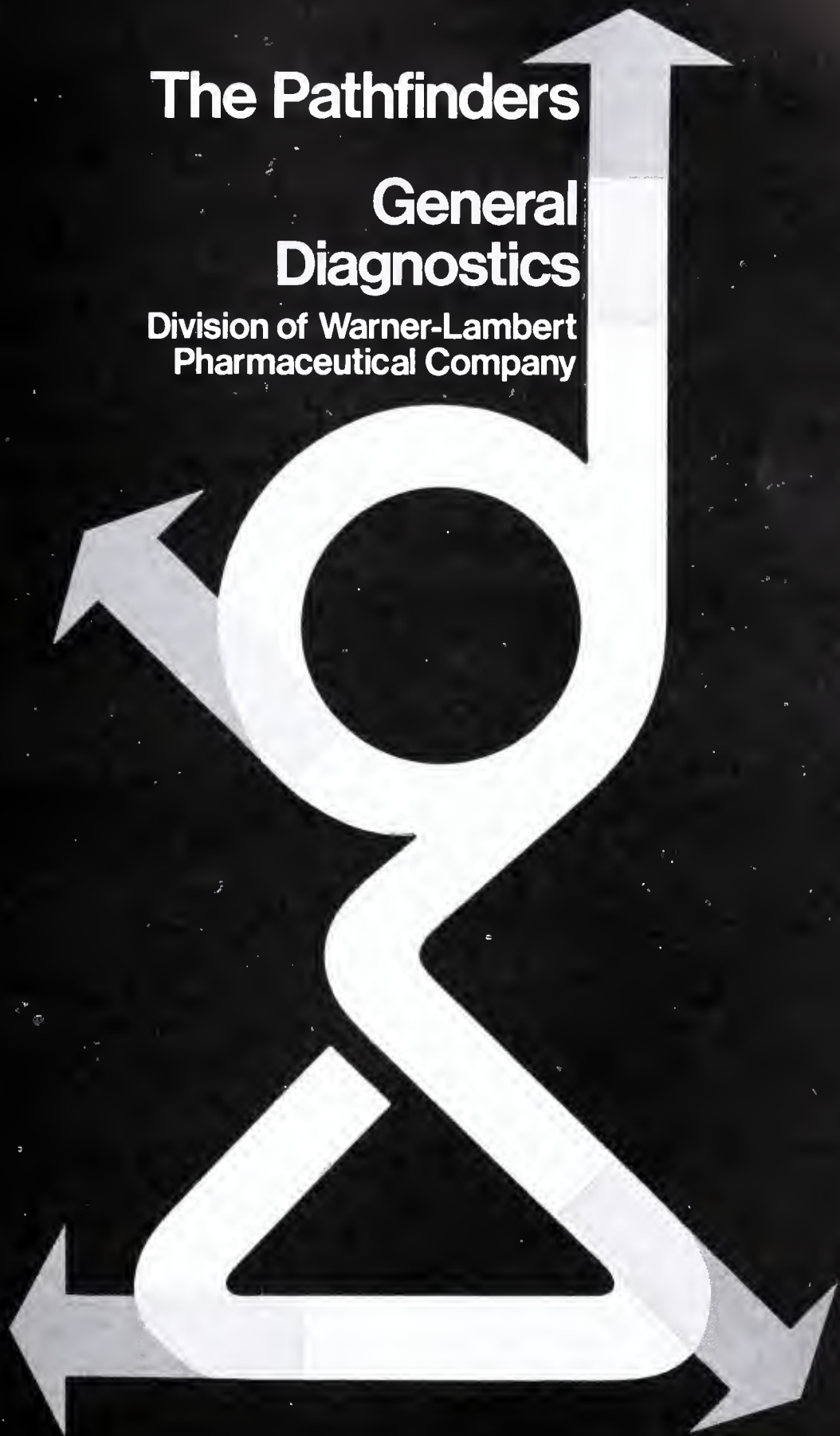
"This communication describes three patients with mitral stenosis and coexisting pulmonary fibrosis due to pneumoconiosis. Significant pulmonary edema was present in all three patients. However, the degree of mitral valve disease and the left atrial pressure elevation was mild to moderate and not sufficient to cause pulmonary edema; thus, it appeared that other mechanisms were involved. With adequate surgical relief of the mitral stenosis, the symptoms of pulmonary edema ceased,

continued page 525

The Pathfinders

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★Pre- and Postoperative Management of the Cardiopulmonary Patient

The Nineteenth Hahnemann Symposium

Edited by Wilbur W. Oaks, M.D., and John H. Moyer, M.D., 407 pp., illus., \$24.75, Grune & Stratton, 1970.

THIS EXCELLENT REFERENCE SOURCE puts cardiopulmonary disease in a very pragmatic setting, i.e., a medical-surgical venture, as so many of these problems are managed today.

The many situations and problems encountered in cardiopulmonary disease are presented in a concise but complete manner by different authors. A good basic science background is included, which gives it full body and makes for better understanding. It is as up-to-date as any textbook could be and should be very useful in daily patient management.

R. MAMIYA, M.D.

Acute Myocardial Infarction and Coronary Care Units

Edited by Charles K. Friedberg, M.D., with 29 contributors, 288 pp., \$9.75, Grune & Stratton, 1969.

FROM ITS INCEPTION, the philosophy of coronary care has been dynamic as well as militant. Concepts of care have been continually changing and changed. For this reason, a book (which is static) about coronary care must be looked at with suspicion, since the dynamic nature of this new therapeutic philosophy is almost contradictory to the nature of Book.

With this in mind, this reviewer went through this volume. The universals of coronary care are surprisingly well described and emphasized, and the static specifics of coronary care are minimal and well stated. My overall impression is that this is a worthwhile hardback book about coronary care.

The book was originally printed in the journal *Progress in Cardiovascular Diseases* in 1967. The chapters were then edited for this book by Dr. Friedberg. Certain chapters stand out even now, three years later: the first chapter, about coronary circulation and the conduction system in acute myocardial infarction, by Thomas James; the treatment of arrhythmias and infarction, by John Kimball and Thomas Killip; Gunnar *et al* on hemodynamic measurements in the coronary care unit is particularly worth reading. The chapters regarding cardiogenic shock are also worth reading because, in a sense, they are still up to date: our knowledge of cardiogenic shock and its therapy has not advanced significantly in the three years since the article was written. Other chapters, such as the one concerning therapy for heart attacks with hyperbaric oxygenation, and the two articles regarding "polarizing" solution, are also interesting in a historical sense, since both of these concepts of therapy have been discarded in the main, based on clinical experience in the last three or four years.

In summary, this book represents an ambitious attempt

to accomplish what is probably not possible, a "text" on coronary care. However, each chapter can be evaluated individually and value found in each.

EDWARD L. CHESNE, M.D.

Drugs of Choice, 1970-1971

Editor Walter Modell, M.D., 924 pp., \$20.50, The C. V. Mosby Company, 1970.

DR. MODELL has done an excellent job of seeking out contributors who spent much time explaining the pathologic physiology of the symptom or sign to be treated and then select the drug or drugs which would be useful. The first three chapters should be read by all practitioners of medicine, since much of this has been forgotten in our daily practice. In using different drugs, one frequently overlooks some basic concepts: e.g., rate and extent of absorption, site of absorption, protein binding, elimination, and therapeutic ratio. The late Dr. Karnofsky has done an excellent job in the chapter on cancer chemotherapy.

The alphabetical drug index may be useful for quick reference.

This book is recommended as a reference book more than for the everyday practice of medicine. For this, the *Physician's Desk Reference* appears ideal.

NOBORU OISHI, M.D.

Modern Surgery

Edited by Richard H. Egdahl, M.D., and John A. Mannick, M.D., 1,194 pp., illus., \$19.75, Grune & Stratton, 1970.

THIS is an unusual approach to a surgical text. Basically, it is a collection of current articles from surgical journals personally selected by the authors. Each article is followed by a discussion, written by request, entitled "Overview." The discussion includes an annotated bibliography.

The 94 surgical problems included represent a good cross-section of current surgical practice.

F. B. WARSHAUER, M.D.

Synopsis of Clinical Cancer, 2d Ed.

By Condict Moore, M.D., pp. 267, \$11.75, C. V. Mosby, 1970.

BASIC INFORMATION on clinical cancer is presented in this concise monograph, prepared especially for medical students and house staff officers. Although the format permits easy grasp of pertinent information, elaboration on therapeutic principles in the management of the various cancers throughout the body seems sparse. Suggested reading for the early student in clinical oncology.

EDWARD JIM, M.D.

★Progress in Gynecology, Vol. 5

Edited by Somers H. Sturgis, M.D., and Melvin L. Taymor, M.D., 585 pp., \$22.75, Grune & Stratton, 1970.

VOLUME V comes seven years after Volume IV, and like preceding volumes represents advances since publication of the previous edition. Progress, however, appears to be accelerating more slowly. Not all of the text can be viewed as an advance. Some of it is review (such as the molecular mechanisms of hormonal action), survey (colpomicroscopy), and status reporting (the intra-uterine device). True progress has mostly been made in the field of gynecologic endocrinology, its biochemistry and laboratory diagnostic methodology. Certainly, vigorous attempts have been made in the area of gynecologic malignancy, but whatever success has been achieved in survival rates is largely due to early diagnosis. Therapeutic efforts themselves have not really enhanced cure rates except in a few instances such as trophoblastic disease.

There is much to learn, as the text implies: "the basic mechanism of ovulation . . . is unknown," "the mechanism of action of clomiphene . . . has not been clearly defined," "how IUD's work is unknown," "the mechanism of action of progestational agents (against endometrial carcinoma) remains obscure," etc.

Volume I was characterized by its distinguished contributors, and this has been so with each volume. The promise for future volumes is then evident. A basic text it is not, but as a survey of the esoterics of gynecology, it is outstanding.

MILLARD SETO, M.D.

★Synopsis of Obstetrics

By Charles E. McLennan, M.D., with the collaboration of Eugene C. Sandberg, M.D., 8th edition, 496 pp., illus., \$9.50, C. V. Mosby Company, 1970.

THIS EIGHTH EDITION comes after four years, the author now working in collaboration with a colleague. Thirty-three chapters and 484 pages of text are presented, up from the 32 chapters and 458 pages of the previous edition. The additional chapter is on contraceptive methods.

There is definite updating of material, skillfully woven into the text of the previous edition. All areas were revised: trisomy-monosomy-mosaicism, uterine aspiration as an abortion technique, and sexual physiology per Masters and Johnson attest to this.

As a concise summary of obstetrics used as such, this book is highly recommended.

MILLARD SETO, M.D.

Cooper Quiz Answers *continued from 522*

which indicated that even mild elevations of left atrial pressure, when acting in concert with primary pulmonary fibrosis, can be responsible for pulmonary edema.

"It is postulated that the compromise of lung lymphatic drainage by concurrent lung disease represents the "additional factor" present in these patients. In particular, the importance of pulmonary lymphatic resorption of pulmonary capillary fluid is relevant in explaining the pathophysiology of these patients." (p. 248, col. 2, para. 2)

(6) TRUE

"Debrisoquin sulfate (Declinax), a postganglionic sympathetic blocking agent, was administered to 28 patients with sustained diastolic hypertension. The total daily dose, which ranged from 20 to 140 mg, averaging 69 mg, was given in divided doses at 6- to 12-hour intervals. A significant reduction in mean blood pressure (MBP) (20 mm Hg or more) was achieved with administration of

debrisoquin alone in five of the 25 patients when recumbent and in 12 patients when standing, and on the addition of hydrochlorothiazide for six of the 14 patients when recumbent and 11 patients when standing. Debrisoquin would appear to have definite but limited utility as an antihypertensive agent, affecting primarily orthostatic blood pressure. It produces few unpleasant symptoms and no overt toxic effects upon kidney, liver, or bone marrow. Its ultimate usefulness will be found in combination with other drugs." (p. 255, "Abstract")

(7) TRUE

"Currently available antihypertensive drugs, which affect catecholamine metabolism and release, possess antihypertensive potency of variable degrees, exert effects on orthostatic blood pressure predominantly, and require careful drug titration. These agents in combination with less potent drugs, chiefly diuretics, will control diastolic hypertension successfully in most patients. Debrisoquin sulfate (Declinax) is a postganglionic sympathetic blocking agent whose mode of action presumably is the prevention of the release of norepinephrine from its peripherally located stores at the neuroeffector site." (p. 255, col. 1, para. 1)

(8) TRUE

"Enterococci (group D streptococci) are responsible for about 10% to 15% of cases of bacterial endocarditis. Since the advent of antibiotic therapy, the death rate of this infection has varied in different series from 20% to 50%.

"The therapy for enterococcal endocarditis differs substantially from that of endocarditis caused by most other streptococci. Although these organisms are relatively resistant to penicillin and even more resistant to streptomycin, the combination of these antibiotics shows a synergistic bactericidal effect in vitro, and therapy with this combination has given the best results. The regimen most widely employed has been the combination of penicillin G potassium in large doses and streptomycin administered for a period of six weeks." (p. 258, col. 3, para. 1)

(9) TRUE

"Enterococci are part of the normal flora of the bowel, genital tract, and anterior urethra. The genitourinary tract is a common portal of entry of organisms in patients with enterococcal endocarditis and was the presumed portal of entry in 47% of the patients in the present series. Instrumentation of the urinary tract is common in men with prostatic diseases; and in women instrumentation or manipulation of the genitourinary tract occurs in pregnancy, abortion, or childbirth. Therefore, it is not surprising that enterococcal endocarditis occurs with increased frequency in elderly men and women of child-bearing age." (p. 262, col. 1, para. 4)

(10) FALSE

"The renin-angiotensin-aldosterone system was studied in patients with renovascular hypertension. When a liberal sodium diet was used, aldosterone excretion rate was increased in four of 14 patients with benign hypertension, who subsequently improved postoperatively. Aldosterone excretion rate was measured in six patients following surgery, and the values were lower than preoperative values in all six. Aldosterone secretion rate tended to be slightly higher in patients who improved postoperatively than in those who did not improve. Both the excretion and secretion rates were elevated in all five patients with malignant hypertension. The level of arterial angiotensin was normal in all patients with renovascular hypertension in whom it was measured. These findings indicate that if the activity of the renin-angiotensin-aldosterone system is increased, this increase is subtle and difficult to demonstrate. Consequently it is unlikely that the blood pressure elevation in patients with benign renovascular hypertension can be explained simply in terms of increased angiotensin or aldosterone production." (p. 265, "Abstract")

with talent, gusto and a high rebounding serve) and his 10-handicap golf game. After a few days of doubles, Gil developed a tennis elbow. We inquired about his serum uric acid level and his honest reply was, "I've never taken uric acid and cholesterol levels on myself... It's OK for my patients... Even if we knew, there is very little we can do about it..."

Pennsylvania's **Raj Kappiareth Nair** lectured at Queen's on congenital heart disease in adults. Raj, medium-statured, sincere, mustachioed, and swarthy, with a residual Indian accent, was typical of the ivory tower complex of over-specialized physicians. We learned that we should "never diagnose tetralogy of Fallot in a case of dextrocardia with situs inversus" and he warned, "Be aware of what to look for... Look for associated anomalies."

Professional Moves

We are forever catching up with earlier clippings. In February, urologist **William G. Davis** opened his office at the Professional Center Bldg., 1481 S. King, and psychiatrist **Dixie Miyahira** opened hers at the King-McKinley Bldg., 1040 S. King. In March, internists **Henry Fong** and **Walter Watt** relocated to 1481 S. King and on the Big Island, **Charles Hesterly** opened his GP office at Honokaa, Hawaii, while OB man **Edward Ballerini** located at 101 Hualalai St., Hilo... April found ophthalmologist **Louis A. D'Avanzo** locating at Kailua Professional Bldg., 30 Aulike St. May found OB man **Robert G. Hunter**, formerly with the Medical Group, relocating at 1481 S. King St., and surgeon **Francis F. C. Wong** announcing the resumption of his practice at 101 Hualalai St., Hilo. In June, **James Ball** (still sporting his Abe Lincoln beard and formerly with the Straub Clinic), relocated to Queen's Medical Center to head the Queen's Nuclear Medicine Department.

Life in These Parts

Bob Krauss, in his book "High-Rise Hawaii," claims Hawaii is the cleanest state in the nation. The magazine *Honolulu* covered the bathing habits of some of Honolulu's best known personages, and we gleaned the following tid bit on our editor in chief: "**Dr. Harry Arnold Jr.** showers in the morning and he always sings—Kathleen Mavourneen or Shall I Wasting or The Fox—but with variations. He shampoos his own hair—but then I have square hair... short, that is.' (sic) He shaves after the shower because 'the extra soaping and soaking are ideal preparation for an easy razor shave.' Dr. Arnold avers that 'showering is the only way to go unless you have a long, cold winter's night to compensate for—and even then, a shower first is the only way to avoid soaking in your own bath water. I don't like to bathe in water I wouldn't drink!'"

Columnist Eddie Sherman: "Wise medic: **Dr. William Sage** (Prez of the Hawaii Heart Assn.)."

In Miss Fixit's column, **Bill Gullede** thanked a Nora Takabayashi for finding and returning his wallet. Bill dropped his wallet in the HIC parking lot and was oblivious to his loss until the finder called him. Says Bill, "I am thanking her publicly to let readers know there are still some honest people in today's cynical world." (Amen).

A couple in their 70's from Japan was recently vacationing in Hawaii on limited funds. The wife developed some gyn disorder, but fearing high doctor fees, hesitated to consult an M.D. When symptoms finally became unbearable, she saw gynecologist **Harry Nakata** who saw and treated her. Sensing their financial plight, Harry refused to accept a fee. The husband, a prominent lecturer in Japan, was quoted as saying: In Japan, today the saying goes "I wa sanjutsu nari" (Doctors practice

figures), but here in Hawaii, the physicians are still "I wa jinjutsu nari" (Doctors practice mercy). When I return to Japan, I intend to tell the people of Japan of the benevolent spirit of the people of Hawaii. (From an editorial comment in *Hawaii Times*.) *Banzai, Harry!*

Dave Donnelly writes: "This time it wasn't J. Ralph Brown, but **Dr. Ira Hirschy** who got 'bugged.' As head of the state's communicable diseases division, Dr. Hirschy tries to keep track of what disease bugs are bugging whom in Hawaii. But now he says he's 'fallen heir to one of those things I'm usually investigating.' Seems he ate some rice cake goodies rolled in coconut and contracted what he self diagnosed as 'some kind of staphylococcal toxin'." (Now it can be told how a Thursday Golf Club party was arranged by **Herb Takaki** at a prominent local teahouse. At least 18 of the 25 club members, most of them physicians, developed fulminating diarrhea approximately 48 hours after enjoying a specially prepared seafood cuisine. The amount of Lomotil and the variety of antibiotics taken without any stool cultures and sensitivity studies was simply appalling, but then, when one is too sick to be scientific, expediency is the key word. Moreover, in deference to the owner of the tea house, whose son-in-law is a local pathologist, no one even bothered to report the incident, it seems...)

Intrepid fishermen **Tom Frissell** and **Ted Tseu** spent four days in a charter boat fishing off Tom's favorite haunt off Niihau... Tom revelled in getting away from irksome patients and county society affairs, while Ted simply revelled... Ted latched onto a 300-lb. marlin, which he reeled in undaunted by two giant waves which doused him during the fight, but Tom's 375-lb. marlin committed suicide by diving to a 500-yard depth. The fish became dead weight and deprived Tom of the pleasure of boating it single handed. (All Tom could think of was that he needed his hands for the two cataract surgeries scheduled next morning.)

Herbert Pang has the only endowed chair in the St. Francis Hospital coffee lounge. Herb apparently has a crick in his neck which prevents a full range of motion and so he has to sit in this particular chair in order to join the coffee lounge gang... Anyone who sits in it unknowingly is removed bodily...

On March 22 at approximately 12:30 p.m., we heard all this whooping and tooting like a pack of wild Indians on the usually sedate Makaha West Course. When calm reigned once again, we learned that **Al Chun Hoon** had just made a hole-in-one on the 10th hole and that all that commotion was being raised by one person, our irrepressible **Catalino Cachero**, who was Al's partner. One of Al's opponents, **K. S. Tom**, accepted it rather glumly... With refreshments costing what they do at the Makaha Inn, we decided to take a rain check on the usual round of free drinks...

The Annual DDD (Doctors, Dentists, and Druggists) Tournament

The traditional rain squalls and gusty winds were missing at this year's DDD tournament, held on April 20 at the Francis Brown Golf Course, with 51 physicians participating. In fact the weather was so perfect and the course in such excellent condition, we shot terribly... But not so with **Bill Dang** (who had only recently won the Annual St. Francis Hospital Classic). Bill shot a sparkling 84-22-62 to cop the overall low net. (When queried, Bill attributed his golf skill to reading Ben Hogan's *Modern Fundamentals of Golf* at least 100 times.) Another ardent Hogan disciple, **Nobu Nakasone** shot overall low gross of 76 (even after three putting four greens) a sparkling feat which unfortunately went unrecognized because the golf committee had decided to eliminate the traditional overall low gross prize. (Nobu seriously feels that one should read the *Modern Fundamentals of Golf* at least five times from cover to cover and then read from it at least ½ hour daily).

Other winners included **Ed Izawa**, who shot 83-17-66, and **Toots Fujii**, who shot a sparkling 78-10-68. Grouped at net 71's were **John Ohtani** (who rushed unshaven to the course straight from a delivery), **Cabe Ma**, **Ed Emura**, **Paul Tamura**, and **Ed Kagihara**. At 72's were **Coolidge Wakai** and **Catalino Cachero**. Overall high net for the M.D.'s went to poor, tired, disgruntled **Dick Omura** (who had had an emergency and had gotten less than an hour's sleep). He shot the amazing score of 103-14-89. . . .

The traditional post-tournament party at Kanraku was replete with topless waitresses and excellent food. One hitch to the gaiety came when the usual sporting event was interrupted by a kindly plainclothesman, who tapped a surprised **K. S. Tom** on the shoulder (just as he was having a hot streak) and persuaded him to put away the dice. It seems that our traditional winners, **Phil Lee** and **Joe Nishimoto**, may have to seek their nontaxable revenues elsewhere, but then we have a feeling that our enthusiastic sportsmen, **Roy Iritani** and **Glenn Kokame**, will come up with a solution by next year. . . .

Sportsman Nite

Inimitable comedian **Ed Kagihara** was the MC for this annual event, held this year at the Mid-Pac Country Club through the efforts of a hardpressed, harassed Golf Tournament Chairman **Don Maruyama**. Our avowed Ben Hogan disciple, **Bill Dang**, who was already a double winner (the St. Francis Tournament and the DDD Tournament), completed his triple win by annexing the annual HMA tournament (the win was slightly eclipsed by **Homer Izumi** who tied Bill with an 82-14-68 against Bill's 90-22-68. It seems that Bill had shot a disastrous 50 on the front nine but with nerves of steel came through on the difficult back nine with a sparkling 40). **Al Ho**, who conveniently turns off his hearing aid to concentrate better, shot an overall low gross of 78 to win the Gaspar Perpetual Trophy for the third time. Second low gross was **Ike Nadamoto** with 80 and "Thinking Player" **Nobu Nakasone** was tied at third low gross with **Dick Lam**. Close behind **Bill Dang** and **Homer Izumi** in low net was **Herb Takaki** with a net 69. At net 70 were **Tom Fujiwara** and **Ed Izawa**. At net 71 were **Joe Nishimoto** and **Glen Kokame** and at 72's were **Y. Fukushima**, **Masaru Koike**, and **Dick Ito**. **Don Maruyama**, **Al Perez**, and **Catalino Cachero** shot net 73's.

The nonhandicappers played a Peoria system and **Allan Young** won with a 115-72-44 while at second place was **Bill Stevens** with 92-46-56. **Ed Kagihara**, we sadly report, won high net. . . .

Witty **Ben Tom** MC'd the tennis event, which was as yet incomplete since the second half was rained out. Some of his commentary may be of interest: "The 4th Annual Tennis Tournament has now gained USLTA endorsement. . . . It becomes more and more complicated

each year. . . . In fact it's not done yet (with reference to the rain which wiped out the afternoon tournament at Beretania courts). . . . In preparation for the tournament, **Leabert Fernandez** increased his androgen intake. . . . There were a few testicular transplants at Leeward Clinic (where **Howard Liljestrand** and **R. R. Patterson** practice). . . . **Yutaka Yoshida** meditated at the Hongwanji Temple and **Raj Mehta** was doing his yogi. . . ."

In presenting the fishing derby prizes, Tournament chairman, **Andy Morgan** complained, "The weather was chop suey. . . . The boys got green around the gills. . . . Four boats went out. . . . **Jim Cherry**, myself, **Harold Sexton**, and **Buz Dorman**. . . . Jim went 30 miles out to the Banks and caught no fish. . . . The boat results were, Cherry zero, Dorman two aku, Morgan three mahimahi, Sexton nine fish. . . ." **Harold Sexton** was awarded the prize for the "largest fish," a 28-lb. mahimahi and the "most fish caught." **Herb Uemura** won the "second largest fish" prize. Dauntless **Phil Jones** (who gets green everytime he goes out) caught a 20½-lb. ono and the biggest ahi (by chumming?). **Jim Cherry** received the Lemon trophy and commented, "I've had lots of skunks, but this is the first time it was announced three different times." **Andy** commented drily, "We must encourage more people to participate. . . . The fish only cost about \$100 per pound. . . ."

The 4th Annual HMA Tennis Tournament

With weather threatening, the morning half of the 4th Annual HMA Tennis Tournament got off to an auspicious start at Kam Courts on May 3 where 16 stalwarts paired off into 8 doubles teams played an 8-game round robin series. **Hunky Chun** and **Bruce Joseph** won a hotly contested first place while **Walt Shim** and **Cal Sia** nosed out **H. Yokoyama** and **George Suzuki** for second place. The touted team of **Charley Ching** (with a tennis elbow) and **Ben Tom** (with a strained back) fell back this year. **Sau Ki Wong** and **Young Paik** put up a valiant struggle and were clobbered. **Fred Dodge** and **Noberto Baysa** put up an equally valiant fight and lost. . . .

The Beretania Courts Flight scheduled for the afternoon was soon washed out by heavy rains which started at 12:30 p.m. and were rescheduled for the following Sunday (Mother's Day and **Yutaka Yoshida's** birthday at that). With good weather, the ageless combo of **Yoshida-Fernandez** won first place, while **Shig Horio** and **Raj Mehta** took 2nd place. Third place was won by the surprise duo of **Jim Bennett** and **Victor Dizon**, who deserve a "most improved team of the year" award. **Howard Liljestrand** and **R. R. Patterson** started out like a team on fire, succumbed to the heat and fizzled to fourth place.

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BLEMISHES?

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Social News

Alas, our confirmed gay bachelor **Ray Fujikami**, who believes in long engagements, finally succumbed to social amenities and married Diane. Over 900 guests stood footsore in a snake line in the Coral Ballroom corridor for over an hour to gain admission. The MC described Ray as "of the Mercedes Benz and champagne set. . . . And known to be a great lover (*pregnant pause*) of plants. . . ." Bestman **Richard Chang**, who was responsible for Ray's meeting Diane, toasted the couple with "It's not often that an internist ties a knot. . . . May their lives be a happy adventure. . . ." A surprised (and a bit nervous) **Tom Maeda** was called on to give the traditional banzai's, and carried it off with a remarkable composure. . . . Those resplendent penguins in their tuxedos were ushers **Don Maruyama**, **Hideo Oshiro**, and **Ed Jim**. . . .

Notes and Comments

Dialogue from an oncology conference re a 46-year-old man with adenocarcinoma of the prostate with bony metastasis: Pathologist **Takuji Hayashi** was a bit skeptical: "We usually disagree on a diagnosis. When all three of us concurred on this case, we felt something was wrong." Moderator **Noboru Oishi** asked impatiently, "What is to be done?" **Ed Quinlan**: "I would treat." **Quintin Uy**: "How about giving estrogen after orchiectomy?" **Carl Boyer** snickered, "And increase his chances of dying from coronary artery disease?"

During an executive committee meeting on committee activities, **Ed Childs** reported: "The Research Committee met only once last year." Then he felt obliged to explain, "Research proceeds slowly, you know. . . ." Someone asked what a joint conference was and **Ed Childs** replied with typical humor: "That sounds like an orthopedic conference."

Harry Arnold, Jr., reviewing the book, "Structural Units of Medical and Biological Terms" was so candid that it must hurt: (The book) "suffers from so many omissions and so many mysterious inclusions that it cannot be recommended, not even for very young persons or for medical secretaries. . . ."

Ben Tom had recently watched **Denton Cooley** remove an aneurysm of the ascending aorta and recalled his running commentary: "Now, handle it v-e-r-y gently—like porcupines making love. . . ."

Aku, our favorite radio commentator, defines plastic surgery as "When you operate on your model airplane. . . ."

George Suzuki recently returned from visiting three medical centers in Japan, where he observed endoscopic techniques, and was enthusiastic about their duodenoscopies and tertiary bronchoscopies. . . .

Tommy Chang, assistant City & County physician, feels that C & C ambulances should be equipped with mobile coronary units and that his ambulance crews are a highly trainable bunch. (We agree, having worked with them for over 3½ years.)

Mits Tottori has a patent pending for a cold water coffee maker. He learned the technique from our late **Ralph Platou**, and Mits has added his own modifications. The resulting coffee syrup can be stored in the refrigerator for over a month and still retain its flavor. Coffee is simply made by adding hot water to an ounce of the syrup. . . . Connoisseurs will agree on the exquisiteness of the taste. . . .

Elected, Honored, and Appointed

Belated kudos to our editor, **Harry L. Arnold, Jr.**, who was elected president of the American Dermatological Association at its annual meeting in Florida back in March. **Lup Pang** was one of five prominent islanders

named to the East-West Center review board. **George Mills**, a 1940 graduate, received the first Outstanding Alumni Award of the Kam Schools Alumni Association at their annual alumni luau at HIC. **F. J. Pinkerton** received the American Association of Blood Banks' distinguished service award in special ceremonies at the Hilton Hawaiian Village. **Clagett Beck** was elected governor of the Society of Colonial Wars in Hawaii. **Roy Kaye** was reappointed to the Commission on Children and Youth. **Isaac Kawasaki** was reappointed to the Civil Defense Advisory Council, and **George Goto** was reappointed to the Western Interstate Commission for Higher Education. **Phil Jones** was elected president of the Hawaii Thoracic Society, while **Joseph A. Palma** was elected vice president and **Kirsten Vennesland** was named secretary-treasurer. **Ronald Yamaoka** was elected to fellowship in the American Academy of Pediatrics. **John Lowrey**, HMA president, was named "Father of the Year" for the medical profession. John maintains, "Parents should be open minded enough to listen to the offspring, but not accept their ideas just to keep on their good side." John feels that independence is important for children and that parents should help foster it.

William Sage, outgoing president of the Hawaii Heart Association, was awarded their distinguished service medallion. **Niall Senlly**, chairman, Risk Reduction Committee, received the meritorious service award. **Ed Chesne** was elected president. **Alfred Morris**, president elect, and **Douglas Bell**, second vice president. **Masato Hasegawa**, program coordinator and director of the RMP, received a Distinguished Service Citation from his alma mater, the Wayne State University School of Medicine, in Detroit. **Jack Keenan**, president of the Hawaiian Harlequins (a local rugby team) will be one of two delegates from Hawaii attending the Centenary Congress of the Rugby Football Union, scheduled in Twickenham, Middlesex, England. **Michael Okihiro** was elected a director of Mid-Pacific Institute Alumni Association. **Ichihiro Nadamoto** was newly elected to the board of directors at Mid-Pac Country Club. **Phillip Chu** is a holdover director.

Announcements:

The American Board of Family Practice announces that it will give its SECOND examination for certification in various centers throughout the United States. The examination will be over a two-day period on February 27-28, 1971. Information regarding the examination and eligibility for the examination can be obtained by writing:

Nicholas J. Pisacano, M.D., Secretary-Treasurer
American Board of Family Practice, Inc.
University of Kentucky Medical Center
Annex #2, Room 229
Lexington, Kentucky 40506

PLEASE NOTE: Deadline for receiving completed applications in the Board office is November 1, 1970.

Loans for House Staff Physicians

The National Association of Residents and Interns, a 42,000 member organization of medical students, residents, interns and doctors, in practice, headquartered in New York, released details regarding a new loan program for its members.

A qualifying member, anywhere in the United States, may borrow up to \$3,000 on an extended repayment basis, running as long as five years.

These funds may be used for any purpose the young physician sees fit, and no collateral is required.

Information regarding this program is available through NARI Headquarters, 292 Madison Ave., New York, N.Y. 10017.

Military Surgeons To Hold 77th Annual Meeting

Emphasizing the theme "Controversies in Medicine," medical officers of the three military services will convene with physicians of the Public Health Service and the Veterans Administration for the 77th Annual Meeting of the Association of Military Surgeons of the United States, to be held at the Washington Hilton Hotel on November 29 through December 2, VADM George M. Davis, MC, USN, the Surgeon General of the Navy and President of the Association, has announced.

Medicine's top man in the Nixon Administration, Dr. Roger O. Egeberg, the Assistant Secretary for Health, Education and Welfare, will deliver the keynote address on Monday morning, November 30.

Postgraduate Course in Laryngology and Bronchoesophagology

November 9 through 20, 1970

The Department of Otolaryngology of the University of Illinois at the Medical Center will conduct a postgraduate course in Laryngology and Bronchoesophagology from November 9 through 20, 1970. This course is limited to fifteen physicians and will be under the direction of Paul H. Holinger, M.D. It will be held largely at the Eye and Ear Infirmary of the University of Illinois Hospital, 1855 West Taylor Street, Chicago, and will include visits to a number of other Chicago hospitals. Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures and several motion pictures.

Interested registrants will please write directly to the Department of Otolaryngology, Abraham Lincoln School of Medicine of the College of Medicine, University of Illinois at the Medical Center, Postoffice Box 6998, Chicago, Ill. 60680.

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Labor Day
Armed Forces Day
Thanksgiving Day
Christmas Day

Special Holidays (closed half day)

Prince Kuhio Day
Good Friday
Christmas Eve
New Year's Eve

For a reminder Holiday Closings will be posted at the Library.

Program for the September 1, 1970 meeting of the Honolulu County Medical Society is "The Extended Role of RN's and the New Role for Allied Medical Personnel in Health Services." A panel will be on hand to discuss the merits of embarking on programs utilizing ancillary health personnel and some of the cautions that must be exercised.

7:30 P.M.

Mabel Smyth Auditorium

As usual, beer and pupus will be served after the meeting.

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Correspondence

To the Editor:

As an official delegate of our State Society to U.S.P.C., I attended the decennial and sesquicentennial meetings and was reelected as one of the twenty physicians of the United States to be on the Committee on Revision (1970-1975). The twenty plus our chosen panel members will choose the drugs of "excellence" for which U.S.P. will determine standards. Previously that activity plus supplying drug reference standards constituted the bulk of U.S.P. activity.

There are certain changes which will be of significance to our membership and because of these changes you may wish to familiarize physicians with U.S.P. I shall enclose the addresses giving only some of which would be of importance to our physicians. U.S.P. and N.F. are the foundations which continuously guarantee the standards for physicians drugs.

Principal changes include the following:

- (1) A desire of U.S.P. to communicate regularly with the organizations which send delegates and not just at convention time.
- (2) Conventions will be held every five years rather than every ten years.
- (3) A resolution passed for U.S.P. to get into the drug

information business, now largely neglected by U.S.P., and now widely recognized as an important need. In this regard, it may serve a quasi-legal status, as its standards now do. U.S.P. and N.F. serve the United States to produce drug standards. They are independent and thus the United States is unlike other countries where standards emanate from the government.

(4) "Young vigorous men" were nominated to replace most of the previous Revision Committee. A new position of Executive Director was made and a new Director of Revision was appointed. All these points should ensure greater vigor and be a part of our society's involvement. It has been my pleasure to serve the Hawaii Medical Association.

In addition to service on this compendium, I have been reappointed as Director of the Committee on Admissions for the National Formulary and a member of its Board. These two official compendia set standards which are accepted without change by Congress (thus become official) and enforced by F.D.A. Since Medicare and many third-party payment systems accept only official drugs for payment, our efforts have gained greater importance.

HARRY C. SHIRKEY, M.D.
Medical and Executive Director
Kauaikeolani Children's Hospital

NEWS

New Data Reported at AMA Convention Indicate IUD the Most Effective Contraceptive Means

New clinical data presented at the American Medical Association Convention in Chicago on June 21, indicate effectiveness rates for SAF-T-COIL, a leading intrauterine device, which are unparalleled by any other contraceptive means—mechanical or biological.

The data, presented on film, summarize three recent studies of a combined total of 3,640 patients in which pregnancy prevention rates were as high as 99.7%, with removals for serious complications or infection amounting to only 0.2% in one study.

The investigators whose studies were summarized in the report are Dr. H. G. Hopwood, Jr., of Arlington, Va., Dr. O. J. Hayes, of Louisville, Ky., and Drs. Betty Vaughn and Hernan Dominguez of Dade County, Fla.

In Dr. Hopwood's study, which covered 1,437 patients, a pregnancy prevention rate of 99.7% was reported, with 2.4% removals for reasons other than the desire for pregnancy and an expulsion rate of 1.9%. (These data represent the most favorable results of any large scale study of any contraceptive means reported to date.)

Data reported by the other two investigations ap-

proached Dr. Hopwood's in effectiveness. In a study of SAF-T-COIL in 200 private practice patients, Dr. Haves reported a pregnancy prevention rate of 99.5%. Drs. Vaughn and Dominguez also reported a 99.5% effectiveness rate in their study of 2,003 patients. Drs. Vaughn and Dominguez further reported that devices removed because of serious complications or infection amounted to only 0.2%, with a zero pregnancy rate among 548 patients followed in their second year with SAF-T-COIL.

The film, entitled "SAF-T-COIL—Insertion Techniques and Effectiveness," also presents a detailed demonstration of an improved insertion technique which appears to have contributed to the unsurpassed success rates achieved with this intrauterine device.

Produced in color and sound, the Super-8 (mm) film will be available on a free loan basis for screenings by physicians, family planning groups, professionals in training, and para-professional groups involved in family planning activities. The film may be obtained on request to JULIUS SCHMID, INC., 423 West 55th Street, New York, N.Y. 10019.



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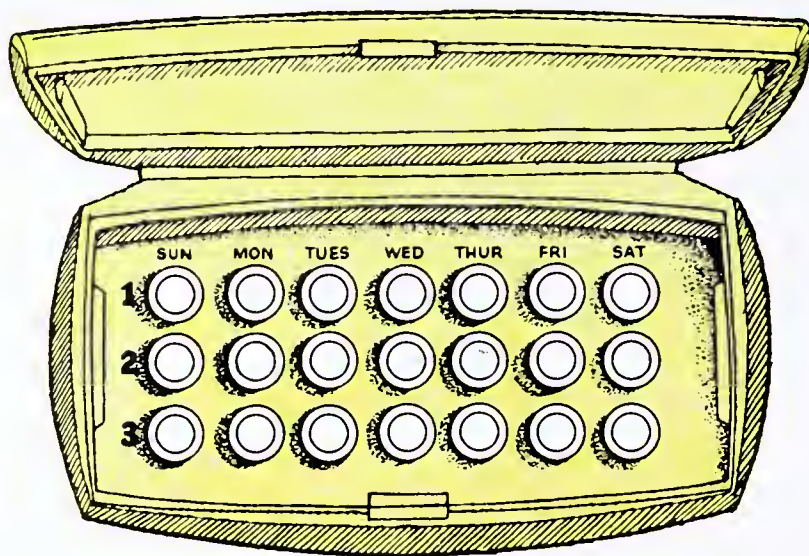
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Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain¹⁻³ leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid re-

tention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, non-functional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967. 2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. 3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2 651-657 (June 14) 1969. 4. Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidemiol. 90:365-380 (Nov.) 1969. OAT

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective

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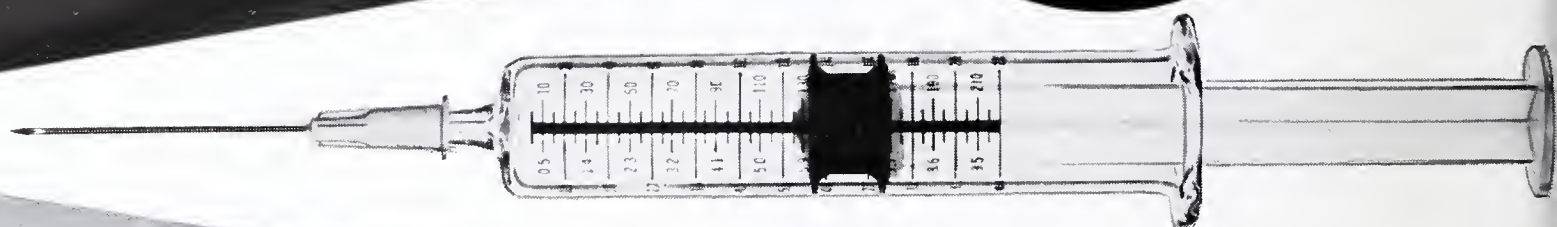


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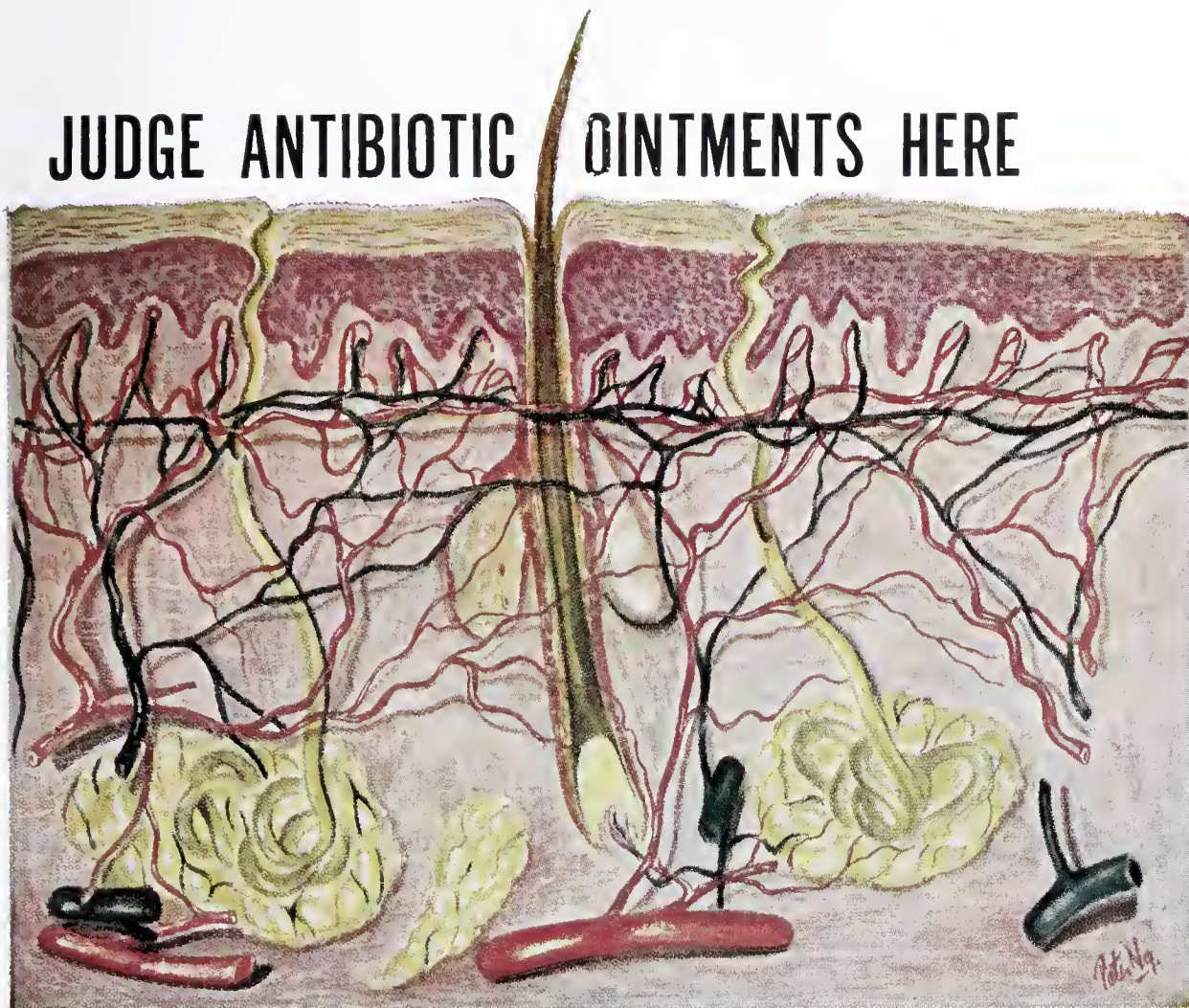
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CONTRAINDICATIONS: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.

PRECAUTIONS: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. **SIDE EFFECTS:** Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.

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Description: Sodium thiosulfate 25%; salicylic acid 1%; isopropyl alcohol 10%; propylene glycol; menthol; disodium edetate; colloidal alumina; purified water. **Indications:** For topical use in the treatment of tinea versicolor (*Malassezia furfur* infection).

Administration: Thoroughly wash, rinse and dry the affected areas before application of medication. Apply a thin film of lotion twice a day or as directed. Although diagnostic evidence of the disease may disappear in a few days, it is advisable to continue the treatment for a much longer period. Clothing should be boiled to prevent reinfection. **Precautions:** If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes. **Supply:** 5-fl. oz. and new economy 12-fl. oz. plastic squeeze bottles.

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Brief Summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

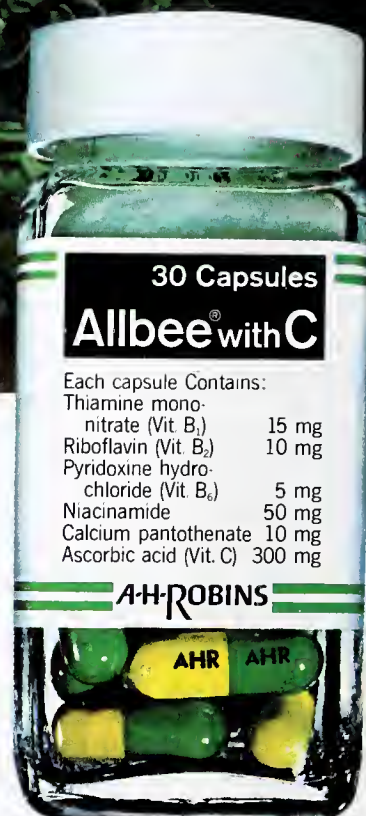
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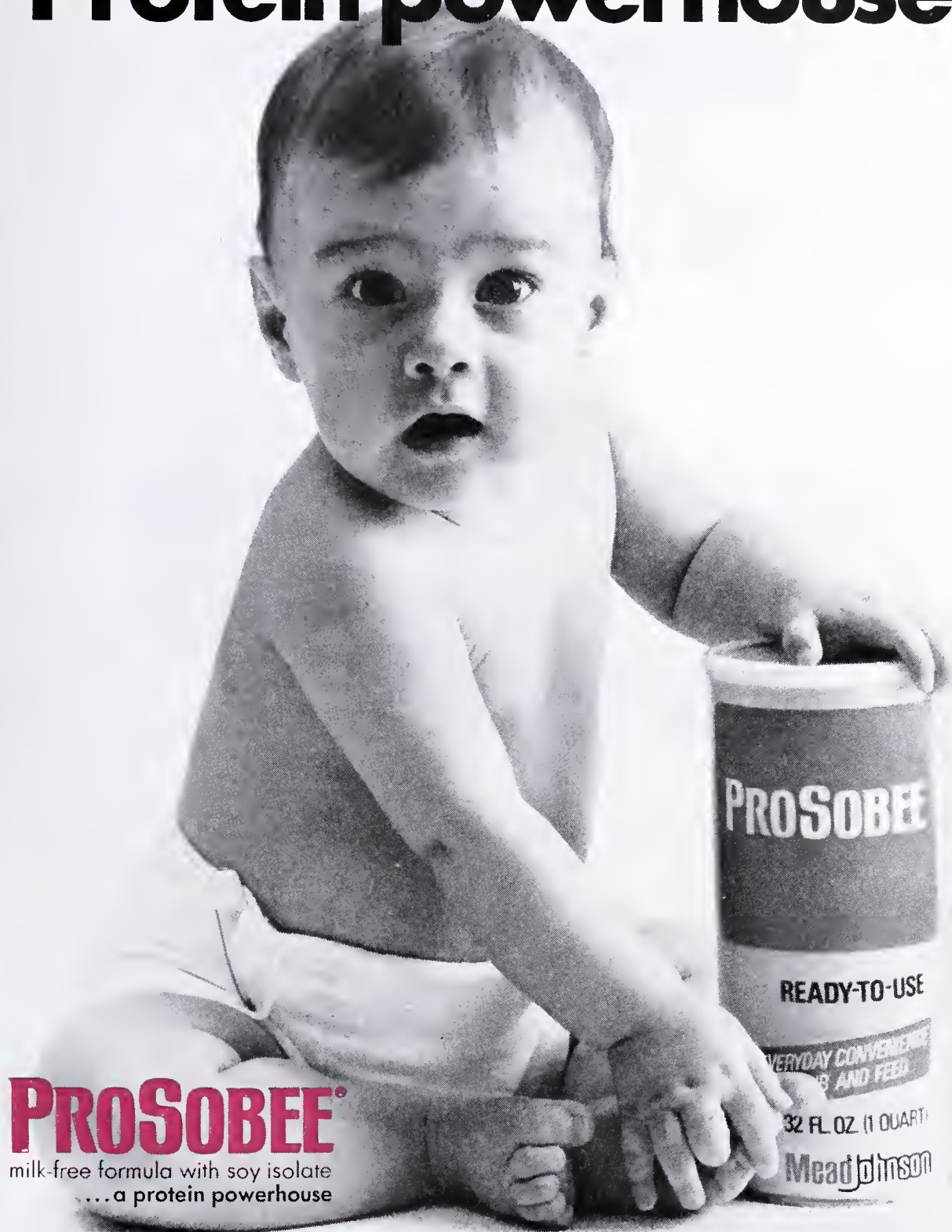


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Thiosulfil® Forte (sulfamethizole 0.5 Gm.)

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Thiosulfil Forte, a highly specialized sulfonamide, delivers its potent and rapid antibacterial action *locally*. In the urinary tract. This is where the activity is needed when you're treating cystitis or prostatitis. Thiosulfil Forte is a *true specific*—hits susceptible uropathogens where they live...hard and fast.

Rapidly absorbed and rapidly excreted, there is so little concentration in the respiratory tract and other tissues that the *only* indication for Thiosulfil Forte is in urinary tract infections. Most of the drug (more than 75 per cent in 8 hours) reaches the urinary tract in a free and active form...to fight the infection.

BRIEF SUMMARY—Bacteriostatic agent for use in Urinary Tract Infection (due to susceptible organisms)—**INDICATIONS:** Thiosulfil is indicated in the treatment of urinary tract infections—cystitis, urethritis, prostatitis, pyelonephritis, and pyelitis—caused by susceptible bacteria, normally *Escherichia coli*, *Klebsiella aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and less frequently, *Proteus vulgaris*. Thiosulfil is useful in the management of patients prone to urinary tract infection because of conditions such as pregnancy, diabetes, or pathology not correctable by surgery. As with most antibiotics and all antimicrobials, Thiosulfil is most effective in acute, uncomplicated urinary tract infections. **CONTRAINDICATION:** Thiosulfil is contraindicated in patients hypersensitive to sulfonamides. **WARNINGS:** Sulfonamides should not be used to treat group A streptococci infections or their sequelae. The occurrence of sore throat, fever, pallor, purpura, or jaundice during sulfonamide administration may be an early indication of serious blood dyscrasias. Frequent blood counts and renal function tests should be carried out during sulfonamide treatment, especially during prolonged administration. Microscopic urinalyses should be done once a week when a patient is treated for longer than two weeks. Urine cultures should be made to confirm eradication of bacteriuria. Clinical symptoms in acute, uncomplicated urinary tract infections frequently disappear spontaneously after three days, and their disappearance cannot be taken as evidence of absence of bacteriuria. (Para-aminobenzoic acid must be added to the culture media while the patient is on sulfonamide.) Because sulfonamides are bacteriostatic, development of resistance by the involved organisms is frequent. **PRECAUTIONS:** Sulfonamides should be administered with caution to patients with severe allergy or bronchial asthma. Sulfonamides should be given with caution to patients with severe impairment of hepatic or renal function. They should be administered with caution to glucose-6-phosphate dehydrogenase-deficient patients since sulfonamides may cause hemolysis.

That's also why you don't need excessive loading or priming doses. And the patient on Thiosulfil Forte uses less sulfonamide...gets more action for his money.

Specific For Urinary Tract Infections

Thiosulfil® Forte

Brand of

sulfamethizole 0.5 Gm.

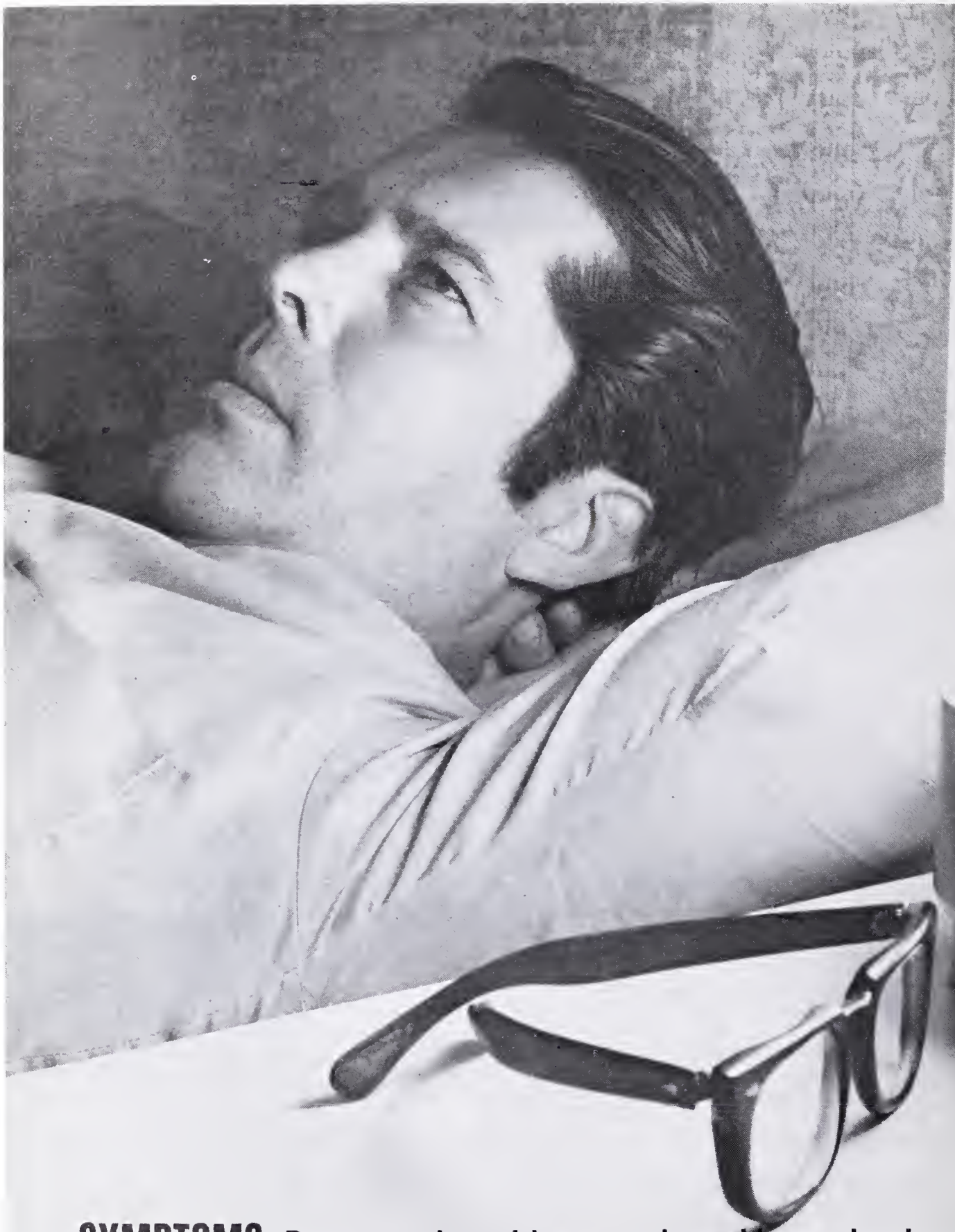
sis in such patients. Adequate fluid intake must be maintained in order to prevent crystalluria. Sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides), and oral hypoglycemic agents. Cross-sensitivity may exist with such agents. **ADVERSE REACTIONS:** Like all sulfonamides, Thiosulfil (sulfamethizole) could cause any of the various allergic reactions (minor to severe) in patients with unsuspected sulfonamide hypersensitivity. There have been isolated reports of serum sickness, periarteritis nodosum, pancreatitis with hepatitis, meningitis, aplastic anemia, thrombocytopenia, drug fever, methemoglobinemia, and cyanosis. Skin rashes, urticaria, and pruritus may occur with its usage. Headache, dizziness, nausea, and, rarely, vomiting have been reported. **HOW SUPPLIED:** No. 786—Each tablet contains sulfamethizole 0.5 Gm. (scored), in bottles of 100 and 1,000.

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Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties

Contraindications: History of sensitivity to meprobamate

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery

Side Effects include drowsiness, usually transient, if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine,

mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand

and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated). Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REOIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

The young homemaker her underlying anxiety and tension can surface and intensify under the continuous stress of rearing a growing family. Especially when she's confined to the home and its environs so much.

You can help her over the rough spots with reassurance and counsel. Equanil can help relieve tension, ease anxiety—with little risk of serious side effects. Time and experience will probably do the rest.

Equanil®
(meprobamate)

Wyeth Laboratories
Philadelphia, Pa.



Photo professionally posed.



**I'll scream
if I don't get away!**

in cardiac edema

Dyazide[®] Trademark

Each capsule contains 50 mg. of Dyrenium[®] (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triam-

terene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Anti-hypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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In 1936 A. E. Smith, professional at Woolcombe, England, recorded the lowest golf score for an 18 hole course. He shot 55 and was 15 under par. The course at Woolcombe, which measured 4,248 yards was covered in 4, 2, 3, 4, 2, 4, 3, 4, 3 out and 2, 3, 3, 3, 3, 2, 5, 4, 1 in.

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Performance proved in practice

Effectiveness: ACHROMYCIN tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms.

Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

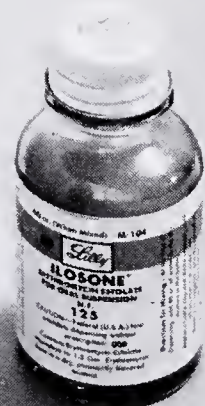
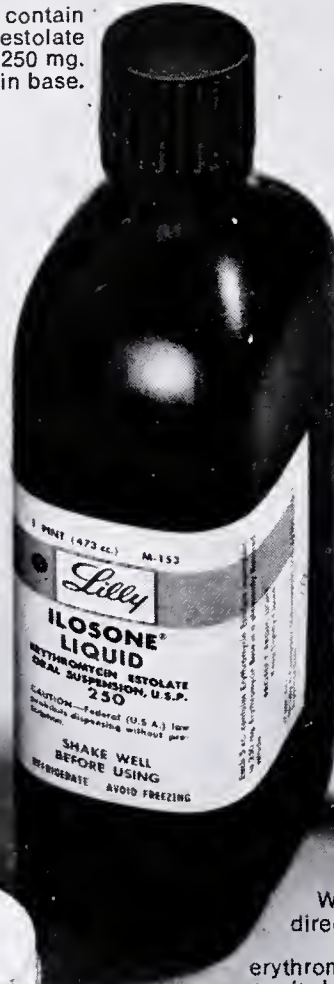
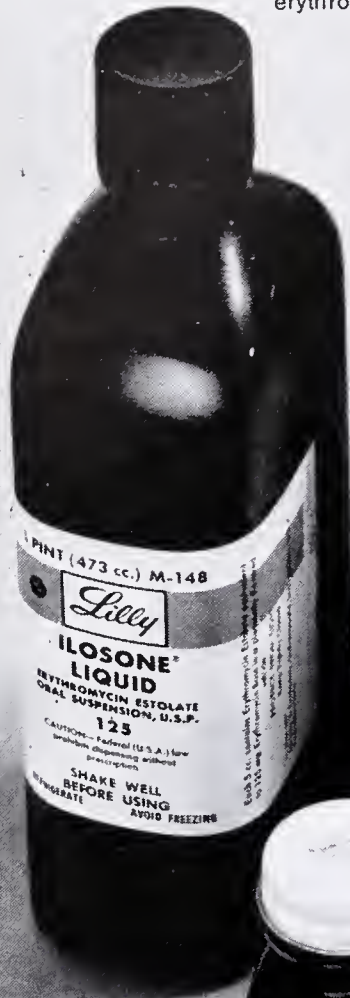
Side Effects: Gastrointestinal system—
anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has disappeared rapidly when drug is discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline

during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—
anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. **Average Adult Daily Dosage:** One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

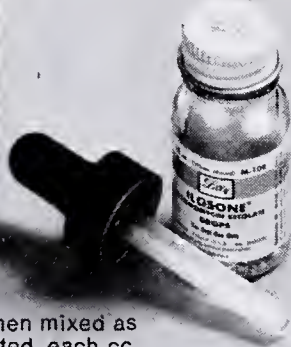


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900761

*"Acid heads" means users of LSD, a potent hallucinogen.
You might have to talk one down out of a "bad trip."*

Caring for the "Bad Trip"

A Review of Current Status of LSD

CARROLL M. MARTIN, MAJOR, M.C.*

● *LSD is a potent hallucinogenic drug and has become one of the mainstays of a large segment of the "turned-on" generation. Its pharmacophysiology is still incompletely understood, but its main effects seem to be upon the central nervous system.*

Although the psychomimetic effects are dramatic and usually pleasant, there are dangerous and occasionally lasting adverse effects. These include schizophrenic and paranoid reactions as well as psychotic depressions and severe panic states. With the widespread use of this drug, more and more of these reactions are being seen in emergency rooms throughout the country. Even more alarming is the increasing evidence that LSD is dangerous to the genetic material of its users and their unborn progeny.

Whether or not the drug again becomes available as a therapeutic agent, its availability as an illicit drug will continue to create problems which the physician must be prepared to handle.

DRUG USE AND ABUSE is a continuing and apparently increasing problem in the "turned-on," "tell-it-like-it-is" segment of our present day society. One drug in particular, LSD (lysergic acid diethylamide), has become one of the most popular psychomimetics with the newest generation of drug users. Its use has given rise to much public interest and debate. Many exhaustive discussions of the various aspects of the drug, such as the pharmacology, psychomimetic effects, therapeutic use, and most recently, its complications, have already appeared in the medical literature. The intent of this paper, therefore, is to review the pertinent clinical features of several aspects of LSD reported in the literature and provide a working knowledge of this drug for the physician who may become involved in caring for the "bad trip."

D-lysergic acid diethylamide (LSD) was first synthesized in 1938 by Hofmann and Stoll of Sandoz Laboratories.¹ However, its profound psychological effects were not noted at that time. In 1943, Dr. Hofmann took a dose, and experienced what was probably the first recorded LSD "trip."

"... I was seized by a peculiar sensation of vertigo and restlessness. Objects as well as the shape of my associates in the laboratory appeared to undergo optical changes. I was then unable to concentrate on my work. . . . I left for home, where an irresistible urge to lie down overcame me. I immediately fell into a peculiar state similar to drunkenness, characterized by an exaggerated imagination. With my eyes closed, fantastic pictures of extraordinary plasticity and intense color seemed to surge toward me. After two hours this state gradually wore off."^{2, 3}

THE BIOCHEMISTRY OF LSD

LSD is a semisynthetic diethylamide of lysergic acid. Of the four stereoisomeric alkaloids which can be synthesized from lysergic acid, but it is the only one which significantly alters behavior in animals.⁴ Its structure is illustrated in Figure 1.

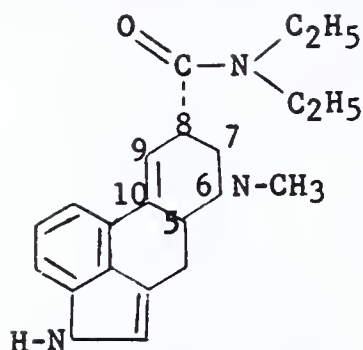
Carbons 5 and 8 are asymmetric, accordingly four isomeric, optically active isomers are possible. These are D- and L-lysergic acid diethylamide, and D- and L-isolysergic acid diethylamide. D-LSD crystallizes in benzene to form pointed prisms with a melting point of 83°C.

LSD has been shown to decrease appetite, increase ammonia excretion, and decrease excretion of urea, creatinine, ketoacids, phosphates, potassium, and total amines.^{5, 6} The mechanism of these actions is not known.

Studies on the toxicology of LSD have shown species differences in the acute IV LD₅₀. By interpolation it has been suggested that the LD₅₀ for man is 0.2 mg/Kg, or about 15 mg. Because this is 60 to 150 times the usual dose (0.1-0.25 mg) many pharmacologists do not consider LSD a lethal toxin for man.

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FIG. 1.—Chemical structure of lysergic acid diethylamide.



PHARMACOLOGY OF LSD

Louria has summarized some of the more unusual effects of LSD. These include: making cats afraid of mice, reducing a spider's ability to make webs, making fish swim nose-up and backwards, causing fever in rats and hypothermia and cata-tonia in pigeons, stimulating rhythmic activity in liver flukes, causing excitation of the cardiac gan-glion of the lobster, and producing expansion of the chromatophores of the female guppy.

Two techniques have been used to study the absorption and fate of LSD in the body. One involves assay in body tissues, utilizing LSD's sensitive antagonism to 5-hydroxytryptamine. The other method utilizes tracer studies with ^{14}C -labeled LSD. With these techniques, much of the pharmacology of LSD has been delineated. It should be emphasized, however, that most of the information comes from studies of laboratory animals, with but few data available for human subjects.

The water-soluble tartrate of LSD is rapidly absorbed from the gastrointestinal tract, and ap-pears in the bloodstream within minutes, with maximal levels being reached in most organs in 10-15 minutes (30 minutes in the liver). The concentration found in various organs in decreas-ing amount is: gut, liver, kidney, adrenal, lung, spleen, heart, muscle, skin, and brain.^{6, 8}

The half life of LSD by the isotope technique is 7-10 minutes, while it is 35 minutes using the direct assay technique. LSD is almost entirely metabolized in the liver and excreted into the bile, with only negligible amounts being excreted into the urine. Most authorities find the main excretion product to be a derivative of 2-oxy-LSD, though many American reports state that it is excreted into the bile unchanged. There are conflicting data as to whether or not LSD is bound to plasma proteins.

Tolerance to LSD is noted to develop rapidly, and cross tolerance to mescaline and psilocybin has been demonstrated. Alcoholics and narcotic addicts generally require higher doses of LSD to produce a reaction.

LSD has an interesting effect on pain.⁹ In 50 severely ill patients experiencing intense pain, no difference in analgesic effect was found between meperidine (100 mg), dihydrylmorphinone HCl (2 mg), and LSD (100 mcg) during the first hour. During the second hour, dihydrylmorphi-none HCl produced better analgesia than meperi-dine or LSD, while during the third hour, LSD was most effective.

Rothlin⁶ has tabulated and summarized the pharmacophysiologic effects of LSD known to date. He classifies the actions into two major groups—peripheral and central. These are sche-matically represented in Figure 2. It is to be noted that all the autonomic reactions to LSD are sympathetic and central in origin, since pretreat-ment with ganglionic blocking agents or sympathi-colytics will inhibit them.

FIG. 2.—Classification of physiologic and pharmacologic actions of LSD-25.

CENTRAL

1. Psychic:
Excitation, mood changes (euphoria or depression), disturbance of perception, hallucinations, depersonali-zation, psychotic states.
2. Autonomic:
Mydriasis, tachycardia, increased body temperature, hyperglycemia, pilomotor reaction, hypotension, respi-ratory depression.
3. Somatomotor:
Ataxia, spastic paralysis.

PERIPHERAL

1. Constriction of:
Uterus
Bronchial musculature
Blood vessels
 2. Adrenolytic action on isolated uterus and seminal vesicle.
 3. Inhibition of 5-hydroxytryptamine.
- (Adapted from Rothlin E: J Pharm Pharmacol 9:569-587, 1957.)

Characteristic of the physiological effects in man are the individualized reactions and effect of the environment on the reactions. Generally there is a long latency period (40-60 minutes) after in-gestion before the psychic effects are noted, while the autonomic effects occur after 20 minutes. The peak of the mental effect occurs in two to three hours and lasts 8 to 12 hours.

Neurophysiologically, LSD seems to act pri-marily at a synaptic level.^{6, 7, 10} It blocks dis-charge of single nerve cells and depresses post-synaptic responses in the lateral geniculate body (the thalamic relay nucleus of the visual projection pathway to the cerebral cortex).¹¹ It can also, depending on the dose, augment or inhibit optic tract discharges and evoke action potentials in the cat retina.¹¹ The thalamo-cortical responses are suppressed, and concomitantly an electroen-cephalographic pattern of alertness is evoked. It has been postulated that this may be due to the

stimulation of the reticulocortical system.¹⁰ Recently, Adey *et al*¹² demonstrated effects of LSD on the limbic system which may have an important role in discriminative behavior. Monroe *et al*,¹³ using depth electrodes, found abnormal electrical activity in the hippocampal, amygdaloid, and septal areas of the brain in chronic schizophrenic patients. LSD given to these patients caused an increase in electrical activity in these areas, which correlated with an increase in psychotic behavior.

The exact relationships of these various neurophysiological changes to what the user of LSD experiences as his "trip" are not clear. It is certainly possible that the various effects upon the optic nerve, optic tract, and retina are involved with the dramatic visual hallucinations.

THE LSD EXPERIENCE

An LSD experience is unique, differing with each individual, and is a function of several factors. These have been thoroughly discussed by Hoffer.⁴ They include the age, state of health, personality, education, and motivation of the person using the drug. Also important are the time of day, number of people present, relation to meals, physical setting, previous experience with LSD, and any underlying psychiatric illness. Hoffer⁴ and Keith¹⁵ have extensively described the changes which accompany LSD ingestion. They discuss them under the major headings of perception, thought, mood, and activity.

Perceptual changes include those in integration of visual, auditory, tactile, gustatory, and olfactory stimuli, as well as changes in kinesthetic and somatic sense, body image, and sense of time. Visual changes are the most vivid. They occur with eyes closed or open. Blurring of vision is common. Hallucinatory images fill the visual world. Patients have described weird patterns such as "ribbons streaming," "glass balloons in the air," "fog or smoke filling everything," or "stuff growing all over everything."

Spatial perception is distorted, with objects becoming alternately large and small, angles becoming exaggerated, and floors and walls seeming to move. Acoustic tiles take on deeper texture and new designs. Two-dimensional objects, such as pictures, assume a third dimension. Faces become flat and lose their three-dimensional contour. Eyes may become slanted and sunken, and stare with a penetrating gaze. Facial shadows and areas of light and dark are accentuated and the skin often assumes a greenish hue. Many comment on seeing their own face or those of their parents staring at them. Hands and feet may seem to pulsate, wither away, or grow fur. Objects frequently change shape and size, and pulsate regularly. Inanimate objects seem to throb with an inner life.

Color distortion is a common and impressive change. Colors seem to change in a kaleidoscope fashion. They often extend beyond the borders of colored surfaces in a fuzzy halo. Unusual colors on familiar objects make them appear grotesque. These color changes are accentuated with the eyes closed. Along with change in color, intensity of light also fluctuates widely.

Qualitative judgment of things seen is dramatically changed also. Objects which ordinarily carry no emotional connotations become very disturbing or very beautiful.

The variety of these minor hallucinations is endless. More formal, structured hallucinations are also quite common. However, the fact that the subjects are usually aware that they are indeed hallucinations is common in both types.

Auditory changes are as frequent as visual, but less stimulating. The auditory changes include increase or decrease in intensity of sound or inability to localize or interpret the sound. Auditory hallucinations are also common.

Taste changes involve mainly an increase or decrease in acuity. Often there is an equally impressive increase in awareness of the texture of food. Olfactory changes usually accompany the taste changes but are minor. Tactile changes are acute, with hyperacuity of texture, especially of inanimate objects.

Kinesthetic and somatic changes are impressive. Subjects become more aware of pressure-weight relationships. Many comment on feeling "clogged up," or being unable to perform physical movements. The somatic changes include such bodily sensations as nausea and aching muscles, and a feeling of tension.

Change in body image is common, often characterized by an "out-of-the-body feeling." Subjects use such expressions as "I feel like I'm a bystander watching myself," or "I have no boundaries—scoop me up off the floor and tie me into a sack to give me some limits." Often a panic reaction will develop for fear they cannot get back into themselves.

Time sense is markedly distorted. Time may stop, become slow or fast. For some, it may even run backward. Hoffer²⁰ described his own experience of the second hand on the clock stopping. Another subject picked up a cup of tea to drink and found the sequence reversed (i.e., he had already sipped from the cup before picking it up). Reaction times are increased.

There is impairment in thought processes. Subjects indicate difficulty in thinking and controlling their flow of thought. Judgment is severely impaired, as are concentration and memory.

Mood changes are often marked. Euphoria is the keynote and often the first sign of the drug

effect. There is great lability of affect, with inappropriate laughing, smiling, or crying. Some subjects feel flat and emotionless, some fearful. Others feel complete contentment and happiness, the so-called "transcendental" state.

Activity changes are generally minimal but quite dependent upon the setting. In uncontrolled experiences, activity may be impulsive and foolish, and at times hazardous to the user or to bystanders.

Psychiatric convention has divided the LSD experience into four phases.⁴ The first is the prodrome. Generally, this is unpleasant. It is characterized by the development of sympathetic excitation, especially pupillary dilatation. There may be nausea but seldom emesis. There is muscle cramping and tension in the muscles. The speed of onset of these symptoms varies according to the route of administration. It ranges from 30 to 45 minutes with 100-250 mcg administered orally, to immediate with intrathecal administration. Depending on the dose, the prodromal phase usually lasts one to two hours. The second phase is the experience. This does not seem dose-related in regard to either intensity or duration. It usually lasts one to four hours. Phase three is recovery, when symptoms begin to wane. There is a return to normal in cycles with each cycle becoming progressively longer. Usually by eight to nine hours after ingestion, only residual symptoms are left. The fourth phase, or aftermath, lasts for another 12 to 14 hours. It usually consists mainly of fatigue and tension, occasionally with some anxiety symptoms.

Some subjects remark on a prolonged state of relaxation and ease, during which time they find it difficult to become irritable or hostile. This may last up to several months.

It should be emphasized that this progression of LSD reaction is derived from the calm and controlled environment of the psychiatrist's couch. When the drug is used illicitly, in less than optimal conditions, the onset, duration and severity of these stages may be markedly altered.

DANGERS OF LSD

Much has been written regarding the complications of promiscuous use of LSD, and several excellent reviews have appeared.¹⁵⁻¹⁹ Cohen¹⁶ has thoroughly reviewed this topic. He classifies the complications as psychotic, nonpsychotic, and neurological. Another group of complications, which can be added to this list, are those of chromosomal aberrations.

Under the psychotic complications he includes accidental intoxication of children, chronic LSD intoxication, schizophrenic reactions, paranoia, acute paranoid reactions, prolonged or intermittent LSD-like psychoses, and psychotic depres-

sions. There are several case reports describing the first two types.

Schizophrenic reactions generally occur in schizoid or ambulatory schizophrenic individuals, who appear to develop an overt psychosis during the LSD experience. The paranoid states are typical of this disorder. Frequently, as a result of an "out-of-the-body" experience, subjects have developed a state of acute megalomania.

Acute paranoid states are usually transient, not extending beyond the duration of LSD effect. There are reports of persons responding to grandiose or persecutory delusional thoughts, endangering themselves or others. The prolonged LSD psychosis is not an uncommon event in chronic users of the drug. Some of these last for months. Frosch et al¹⁸ have confirmed this observation and find that recurrences may occur up to one year later even without further drug use.

Psychotic depressions are usually associated with agitation or anxiety. Often, rage and frustration at being unable to cope with conflicting material is related to an LSD experience.

Nonpsychotic disorders include chronic anxiety reactions, acute panic states, dissocial behavior, and antisocial behavior. Chronic anxiety states may be the most prolonged adverse effect of LSD. Often, depression, somatic symptoms, and difficulty in functioning coexist with anxiety. However, these patients remain in contact, and reality testing is not significantly impaired.

Most acute panic states, however, escape medical attention because of their brevity. At times, an overwhelming panic develops and there is a resultant loss of control and disintegration of ego defenses. Again, self injury has occurred in these panic states. Prolonged (weeks to months) panic reactions have been reported, especially after accidental ingestion of LSD by children.

Dissocial behavior is manifested by loss of previously held values and aspirations. Motivation to work or study may diminish, former ties may be broken, and personal hygiene is often neglected. There is a tendency to form or join cults and use a pseudophilosophical jargon in conversation.

Antisocial behavior has been reported, which includes acting-out of sociopathic or homosexual tendencies. There are also several reports of inadvertent or deliberate suicidal attempts, as well as both abortive and successful homicide attempts. Social and cultural values of right and wrong may be obliterated.

The neurological reactions reported include seizures²¹ and possible permanent brain damage, although this is unconfirmed.

It should be pointed out that many of the supposed cause and effect reactions of LSD rest

solely on testimonial evidence. They are isolated case reports of incidents which occurred when a patient was under the influence of the drug. Cause and effect are surmised but not proven. With the psychotic effects, the argument is offered that LSD did not cause the psychosis but only unmasked a preexisting abnormal state. Be that as it may, the fact still exists that these various complications have all been described with alarming frequency in patients under the influence of this drug.

The incidence of these types of complications is unknown for the large group of illicit drug users. Ungerleider *et al*²² reported that of 70 patients seen at the emergency rooms of Los Angeles hospitals after ingestion of LSD, 25 required psychiatric hospitalization, and 17 of these required over one month of hospitalization. When LSD is taken under medical supervision, 0.08% of normal subjects experience complications. In patients undergoing psychotherapy, the figure rises to 0.2-1.0% and in psychotic patients²³ to 1-3%.

The most recent and controversial argument regarding LSD is whether it causes chromosomal changes or teratogenic effects. This controversy began in 1967 when Cohen *et al*²⁴ reported chromosomal breaks in normal human leukocytes incubated in vitro with LSD. They also found an increased breakage rate in leukocytes obtained from a patient who had received 15 LSD treatments. The breakage rate was 12%, compared to the "normal" rate of 3.7%.

Similar results were obtained by Egozcue *et al*²⁵ in leukocytes obtained from 50 LSD users. Control breakage rate was 9.03%, while that of users ranged from 8 to 45% with a mean of 18.7%. This did not appear to be dose-related. They also found elevated breakage rates in children exposed to the drug in utero. On the other hand, Loughman *et al*²⁶ found no increase in chromosomal breaks among eight users of LSD. In addition to chromosomal breakage, chromosomal rearrangements have been reported.^{25, 27} Whether these abnormalities are permanent or not is unknown. They appear to persist for at least several months after the drug is stopped, and in one case of in utero exposure the chromosomal changes were still present at age 2½ years.²⁷

That LSD may be a teratogenic agent has been suggested on the basis of studies demonstrating a high proportion of embryologic abnormalities and stillbirths in the offspring of rats fed small amounts of LSD during early gestation.^{28, 29} Zellweger *et al*³⁰ reported the birth of a girl with a malformed leg, whose mother had taken four doses of LSD during the first trimester.

It is apparent that the question of whether LSD affects chromosomes or fetal development or both is unanswered. Further investigation therefore, is

necessary to resolve this point. Conclusive proof of this would hopefully be of value in discouraging the use of LSD.

THERAPEUTIC USES OF LSD

With the advent of recent legislation, therapeutic uses of LSD were abruptly curtailed. However, prior to the legislation, there was widespread use, mainly by psychiatrists.

A number of studies have reported beneficial effects in promoting abstinence in alcoholics.³¹⁻³⁵ Although many of the studies were uncontrolled, the majority reported encouraging results. LSD has also been used successfully in facilitating psychotherapy by increasing awareness and insight. It has been especially helpful with psychoneurotic patients who manifest compulsions and phobias.

Claims have been made for its value in treating autism in children,³⁶ homosexuality, and frigidity.³⁷ It has also been used in psychopathy,⁴ and in the treatment of adolescent behavior problems.^{4, 38} Benefit in the management of terminal disease^{4, 7} has also been proposed. Its effect on pain has previously been mentioned.

TREATMENT OF THE "BAD TRIP"

The ordinary LSD experience requires no medical treatment—in fact, it seldom comes to medical attention. It is almost always the "bad trip" that brings victims to the emergency wards of hospitals. Treatment should be nonpunitive and aimed at supportive care.³⁹ An interested, compassionate physician is essential. The patient should be interviewed in a quiet room, without multiple observers. Conversation should be relaxed and quick movements avoided. Generally, this "talk-down" method is adequate to calm the patient and to reassure him that his distortions will abate.

If the level of anxiety seems more severe or likely to lead to other untoward psychological effects, or if the patient is in an advanced psychosis, drug therapy in addition to the "talk-down" may be in order. Chlorpromazine (Thorazine) is the drug most widely used. Fifty milligrams intramuscularly or orally is usually adequate. It may be repeated every two hours if necessary. Diazepam (Valium) has also been reported to be effective.⁴⁰ Generally, hospitalization is not necessary, except in those cases where a severe psychotic reaction develops requiring prolonged psychiatric treatment.

"ACID ON THE STREETS"

With the increasing illicit use of LSD, fewer reactions will be observed in the psychiatrist's office, and more will come to the emergency room off the streets. This requires that the treating physi-

cian has at least a working knowledge of the street vernacular regarding LSD. This most likely will vary from area to area, but some terms seem universal. The following vocabulary is that common to the Haight-Ashbury district in San Francisco.³⁹ Most are aware that LSD is known as "acid" and that users are frequently referred to as "acid heads." A wide variety of forms of LSD is available via a well-organized black market. Merchandising techniques are used, with special brand names, colors, and shapes being used to distinguish one product from another. There are a variety of colorful names, such as "white lightning," "blue dots, pink dots," "purple wedges," "purple flats," "purple owls," "green, blue, yellow, or paisley caps," and "pink wedges."

The quality of the preparations varies, especially regarding the amount of contaminant. There is also discrepancy in the amount of LSD claimed. The street dose in micrograms (called "mikes") is usually several times that of the actual pharmacological measurement. Thus, "blue dots" are alleged to contain 900-1200 mikes, but actually contain 150-200 mcg. Counterfeiting is also a problem. When a brand is finally accepted by the

users as "righteous" (good), counterfeit preparations (usually sugar cubes or aspirin tablets colored with food dye) quickly appear on the market.

Another problem is adulteration. Methamphetamine ("speed") is often compounded with LSD and sold as "pure acid." This particular combination seems to increase the chance of a "bad trip." Another adulterated preparation appeared in San Francisco as "pink wedges." These were preparations sold as 1,000 mikes of LSD. They actually contained 270 mcg of LSD and 900 mcg of STP (5-methoxy-NN-dimethyltryptamine). The release of this product onto the market was followed by a rash of acute psychotic reactions.

The jargon affected by LSD users seems to be almost endless and, as mentioned, is localized to each area. Some familiarity with the user's own language will stand the physician in good stead in treatment of an LSD psychosis.

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Rubella vaccine increased the proportion of immune children from 21% to over 98% in 1,356 children in Hawaii.

Rubella Vaccine Trial in Children in Hawaii

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● 1,356 Hawaiian children participated in a rubella vaccine study. Of this number, 79.1 per cent were found to be non-immune. Following the administration of HPV 77 rubella vaccine, 98.2 per cent developed significant antibody.

WITH THE DEVELOPMENT of rubella vaccine,¹ it seemed appropriate to study it in Hawaii, where a high level of susceptibility to rubella exists.²

VACCINE

Lots 51834 and 51835, HPV 77 strain, prepared by Merck, Sharp & Dohme Laboratories were used.

CONDUCT OF STUDY

The subjects were 1,356 children, from 545 families, between the ages of one and 10 years. To be accepted, children had to be well and have no history of rubella. We included only families with two or more children, in order to evaluate possible virus spread to susceptible contacts.

During the initial visit we drew blood samples from the mother and children, and gave rubella vaccine to the first and third child in each family. Two months later we obtained the second blood samples and immunized the remaining children. Parents were asked to record temperature elevations and other pertinent information, and to mail the history cards two and four months after the first visit.

RESULTS

Sera were analyzed for HI antibody, and those with titers less than 1:8 were considered non-immune. Serologic evaluation was done on 1,331 children, and 79.1% were found to be non-immune. 545 had paired sera drawn, and 535 converted with a rise of HI antibody of 1:8 or higher, giving a conversion ratio of 98.2% (Table 1).

TABLE 1.—Serologic findings for children vaccinated with live rubella vaccine (Lots 51834 and 51835).

Number vaccinated	1,356
Number serologically tested	1,331
Initially seropositive	277
Initially seronegative	1,054
Paired sera	545
Number of conversions	535
Per cent conversion	98.2%

Five hundred forty-five women and 618 children served as contact controls. Of these, 165 women and 518 children were seronegative. Four mothers and eight children converted during the observation period (Table 2). Further studies of these 12 cases showed that the blood specimen had been incorrectly labeled in two cases, possible blood sample mixups in two additional cases, laboratory error in three cases, insufficient blood for retest in one case, and four cases were unexplained. Wild rubella virus was present in the community at the time of the study, but the possibility of virus spread cannot be completely ruled out.

TABLE 2.—Serologic findings for contact controls.

Adult female controls	545
Initially seronegative	165
Per cent seronegative	30.2%
Children controls	618
Initially seronegative	518
Per cent seronegative	83.8%
Number of adults converting	4
Number of children converting	8
Unexplained cases	4
Per cent unexplained converting	0.6%

Clinical complaints were tabulated for the vaccinees as well as for the control group, and 90% had no complaints of any sort; 10% of the vaccinees had symptoms ascribed to unrelated illness.

CONCLUSION

Rubella vaccine (HPV 77) was effective in immunizing 98.2% of susceptible children without producing any appreciable morbidity.

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Halothane and Hepatotoxicity: A Retrospective Review

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● According to the National Halothane Study,²⁵ no causal relationship between halothane and hepatic necrosis has been fully established. However, the rare incidence of halothane "hepatitis" in a few uniquely susceptible individuals cannot be excluded. Current studies have led to the conclusion that halothane has resulted in no higher incidence of massive hepatic necrosis than any other anesthetic agent. Consideration, however, must always be given to careful evaluation of the case reports and their limitations, including such variables as criteria for study groups, sample sizes and sensitivity of laboratory tests.

Until all the potential causes of liver damage, other than the surgical anesthetic, are fully studied and evaluated, no clear conclusion can be reached. But whenever patients, following halothane anesthesia, demonstrate mild "unexplained" fever or jaundice, further exposure to halothane should be interdicted.

In any event, the need for this valuable anesthetic agent appears to outweigh the risks.

HALOTHANE, or 1,1,1-trifluoro-2,2-bromo-chloroethane, was introduced as an anesthetic agent in England in 1956 and in the United States in 1958. Because of its nonexplosiveness, nonflammability, and ease of administration without respiratory irritation, halothane soon became a popular surgical anesthetic, with an excellent safety record. However, because it was a halogenated hydrocarbon, like carbon tetrachloride and chloroform, agents known to cause hepatic damage, special consideration had to be given toward its possible hepatotoxicity. Within a few years after its introduction, isolated cases of massive hepatic necrosis following halothane anesthesia were reported.

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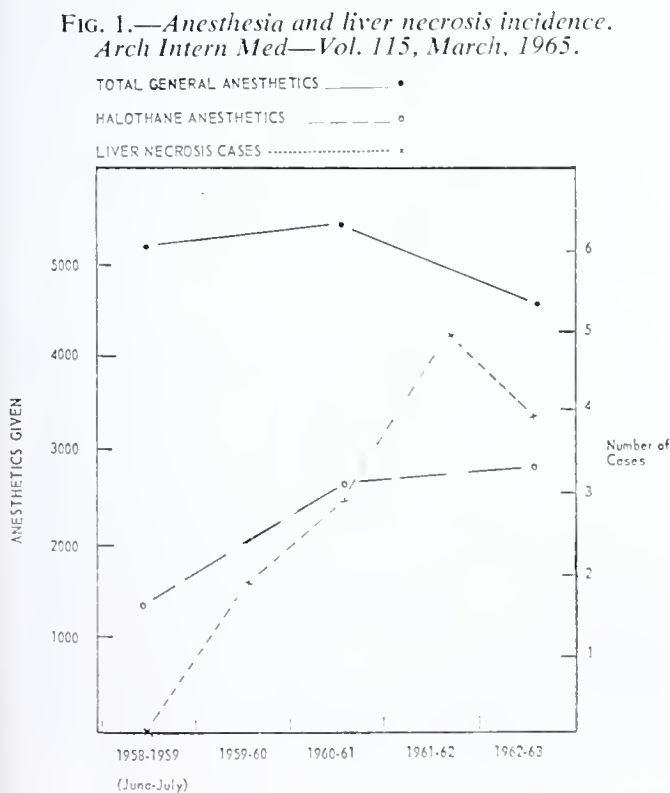
REPORTS OF LIVER DAMAGE

The earliest indications of liver damage possibly attributable to halothane came in the form of isolated case reports and studies. In 1963, Lindenbaum and Leifer¹⁹ reported on nine cases in which they observed the following clinical manifestations of postoperative hepatic necrosis: (1) fever of 101-103°F, always within 24 hours after surgery, (2) nausea, malaise, lethargy in the majority of patients, (3) delayed jaundice in seven cases, and (4) shaking chills, transient right upper abdominal pain, and minimal to moderate hepatomegaly. They reported that the onset of recognizable liver dysfunction occurred within one day to several weeks postoperatively and usually showed the following laboratory abnormalities: (1) elevated serum transaminase (SGPT and SGOT), (2) elevated alkaline phosphatase and prothrombin time, and (3) alterations of the WBC picture with three cases showing leukopenia (1750-3550) and three eosinophilia (6-8%). Symptoms improved within one to three weeks, but liver function tests were required for several months before normal values were again noted. The severity of hepatic dysfunction did not correlate with the duration of the anesthesia or the number of previous exposures to halothane. Heidenberg *et al*¹⁵ and Tornetta and Tamaki²⁶ described in their reports certain common histological characteristics of the hepatic lesions: mainly centrilobular necrosis with some peripheral involvement, periportal inflammatory infiltration, primarily of lymphocytes, and biliary stasis with bile pigment in hepatic cells and bile plugs within the canaliculi.

In 1965, Morgenstern *et al*,²² in a report of five cases of fatal and four of nonfatal hepatic necrosis associated with halothane, claimed that before the introduction of halothane, fatal hepatic necrosis associated with surgical anesthesia was rare. At this particular hospital, no autopsy over a 15-year period reported liver necrosis that could not be directly related to surgical anoxia. However, within a single year following the widespread acceptance of halothane, five fatal cases of hepatic

neerosis were reported. They found that these cases manifested a variable clinical course, with high fever and malaise appearing four to eight days postoperatively. The course could be rapid and fulminating with the terminal onset of hepatic coma and renal failure. Histologically, fatal cases showed characteristics identical with acute yellow atrophy whereas nonfatal cases were similar to changes found in viral hepatitis. Looked at grossly, the livers were smaller and flabbier than normal with sections revealing brownish-yellow mottling and disturbance of normal lobular architecture.

Herber and Specht¹⁶ conducted a survey on 20,000 surgical anesthetics for the five-year period, 1958-1963. They located records of 13 patients with postoperative liver dysfunction. Twelve of these patients had jaundice, appearing one to 32 days after surgery following halothane administration. Five patients had fever in excess of 103.5°F and seven had milder fever, occurring one to three days postoperatively and lasting from one to seven days. Once clinical icterus became manifest, the SGOT, serum bilirubin, and prothrombin time were usually abnormal. Herber and associates found no correlation between the severity of liver necrosis and the patient's age, the preoperative conditions, episodes of hypotension or sepsis, concentration or duration of halothane exposure, or the nature and duration of the operations, nor were they able to find a laboratory or clinical feature that could be considered pathognomonic of drug hepatotoxicity. The association between halothane usage and hepatotoxicity appears to be demonstrable in the following graph:



The incidence of hepatic necrosis following use of halothane was calculated to be approximately one in 800 administrations of this agent.

In 1966, a National Halothane Study²⁵ group reviewed one million operations over a four-year period (1959-1962) in 34 medical centers. Out of a total of 856,500 general anesthetic administrations examined, 82 cases were found to have massive hepatic necrosis (1/10,000 administrations of general anesthetics), and nine were “unexplainable.” It appeared that hepatic necrosis occurred more frequently in higher-death-rate operations (craniotomies, open heart surgery, exploratory laparotomies, etc.), but this does not hold for biliary tract operations.

It became apparent that the incidence of massive hepatic necrosis was considerably higher in patients who had undergone multiple operative procedures, and this seemed especially true for halothane. The clinical picture was characterized by fever within two to three days after surgery, followed by progressive jaundice. Usually, one week after the onset of fever, somnolence, flapping tremor, and confusion progressed to coma and death. The course was quite similar to that of fulminant viral hepatitis and delayed chloroform poisoning.

Histologic examination in six out of seven cases where halothane was administered demonstrated lesions found in viral hepatitis or certain drug-induced hepatitis. This included coagulative hepatic-cell necrosis, negligible sinusoidal congestion, fatty degeneration, and lymphocytic infiltrate in the portal areas. It was concluded from this study that halothane had a good safety record, with an overall mortality of 1.87% as compared to the average for all general anesthetic procedures of 1.93%. In the words of National Halothane Committee:

A most important observation of this study is that the many cases of massive hepatic necrosis which were expected to follow general anesthesia and operation did not materialize. We must conclude, therefore, that if there is a halothane-related hepatic necrosis, it occurs rarely.²⁵

In 1967, Mendel and Trostel²¹ studied 15 cases in which there was postoperative jaundice within 30 days of surgery. All were noted to have received halothane anesthesia, and nine had had multiple administrations. Eight received no other medications considered hepatotoxic; 12 had jaundice within eight days of surgery (too early for serum hepatitis due to blood transfusions administered during surgery); none had a history of exposure to hepatitis; yet all showed laboratory evidence of hepatocellular injury, including elevated total bilirubin, SGOT, SGPT, and alkaline phosphatase, and abnormal cephalin flocculation and thymol turbidity tests. Histologically, there

was mainly centrilobular necrosis, a mixed inflammatory reaction in the portal areas (lymphocytes and plasma cells), and central and peripheral bile stasis.

In 1968, Trey *et al*²⁷ reported on 150 cases of acute fulminant hepatic failure in which 35 exhibited massive liver necrosis less than three weeks after halothane anesthesia. Twenty-two of these 35 cases were associated with *low mortality* operations (i.e., dilatation and curettage, retinal detachment, etc). In 27, there had been more than one exposure to halothane in the same month or successive months. In all cases, acute liver failure was an unexpected complication. Trey concluded that although hepatic necrosis from halothane was a rare complication, multiple exposures to this agent might be associated with sporadic cases of fulminant liver failure.

HOW MIGHT IT ACT?

After the association between halothane and hepatotoxicity was "suggested" by a growing number of case reports, attention was turned toward the possible mechanism of action. There were essentially two explanations: (1) halothane was a direct hepatotoxin or (2) halothane caused liver necrosis via drug idiosyncrasy or hypersensitivity. According to Griner,¹⁴ a true hepatotoxin should induce lesions that (1) occur early after exposure, (2) are dose dependent, (3) are uniform in appearance, and (4) are reproducible in animals. According to these criteria, past and present studies have demonstrated that halothane does not act like a direct hepatotoxin, since it is associated with a delayed hepatic reaction, is not dose-dependent, has no uniformly characteristic hepatic lesion, and is not reproducible in animal experiments. Vickers²⁸ pointed out that, despite the fact that halothane was a halogenated hydrocarbon, this agent did not have the same liver-damaging properties, whereas the toxic effect of halogenated hydrocarbons is dependent on dosage, and more prone to occur under conditions of hypoxia or hypercapnia. Furthermore, halothane caused only minor and transient changes when administered to mice in toxic amounts, or to hypertensive or hypercapnic patients. Bombeck *et al*³ studied the effects of halothane, ether, and chloroform on the cellular metabolism of isolated, perfused bovine livers. Their findings were that halothane (as compared to controls in which no anesthetic was perfused through the liver) had no effect on vascular resistance, liver appearance, bile output, oxygen consumption, glycogen synthesis, SGOT release, or potassium release from hepatocytes.

¹⁴ However, halothane at a concentration of 3%, two to three times that administered during surgery, was discovered to inhibit lactate utilization

(gluconeogenesis), increase glucose release during the period of recovery, and decrease detoxification capabilities of the liver, as demonstrated by an inhibition of the oxidative demethylation of N,N-dimethyl aniline to N-methyl aniline and formaldehyde. Electron microscopy, after a 90-minute perfusion with 3% halothane, revealed clumping of vesicular smooth endoplasmic reticulum, dilated rough endoplasmic reticulum (also seen in the controls) and an increase in the number of free microsomes, disaggregated from the RER, in the cytoplasm. Otherwise, the ultrastructure of the cells was normal, with intact mitochondria, nucleus, nucleolus, and plasma membrane. It was concluded that halothane caused no direct hepatocellular injury, as reflected by the absence of elevations in SGOT and potassium levels. The ultrastructural changes were considered to be identical with those found in shock.

Further evidence against halothane's having any role as a direct hepatotoxin was provided by studies involving liver function tests and in vitro hepatic cell experiments. Kirwan *et al*¹⁷ examined the effects of short exposures of halothane on liver function tests in minor gynecological procedures on subjects in good physical condition. It was learned that there were slight elevations in SGPT following surgery, irrespective of the anesthetic administered, and that abnormal levels occurred more frequently in the *absence* of halothane. No uniform changes were seen in the measurements of urinary urobilinogen with various anesthetic agents.

Christensen *et al*⁶ did liver function tests and cytochemical determinations on fractionated cytoplasm of hepatocytes (SGOT, LDH, alcohol dehydrogenase) in liver biopsies before, during, and after halothane anesthesia. Although serum tests indicated a slight rise in SGOT in four cases and a marked elevation of SLDH in one case, cytochemical determination from all cases showed no statistically significant alterations in cellular enzymes.

Theoretically, cytochemical studies should be the most accurate indicators of liver cell injury. DeBacker and Longnecker,⁸ feeling that SGOT and SGPT measurements are too easily altered by other existing complications, attempted to measure serum isocitric dehydrogenase (ICD) levels pre- and post-operatively in 233 patients receiving general anesthesia. The patients were divided into two groups, one "normal" with individuals in good general health and the other with preexisting biliary or liver disease. ICD determinations showed no statistically significant difference between the "normal" and "biliary" groups receiving halothane and those receiving other anesthetic agents. Out of 22 "normal" patients who

had received halothane six months before the study, 13 received a second exposure without significant changes in ICD values.

Corssen *et al*⁷ examined, by phase-contrast photomicrography and time-lapse cinematography, the effects of halothane and chloroform on *in vitro* cultures of human hepatic cells. The cells were perfused with the anesthetic agent for three days, followed by perfusion with normal nutrient medium. At light surgical anesthetic levels of halothane, neither morphological effects nor impairment of cytoplasmic functions (i.e., pinocytosis) were seen. At deeper levels (52.2 mg% halothane), there was a moderate degree of vacuolization at the end of the second day which was readily reversible with perfusion in normal nutrient medium. At twice the deep anesthesia concentration of halothane (104.4 mg%), a higher degree of vacuolization in a larger number of cells and a concurrent decrease in cytoplasmic activity were observed. These changes were only partially reversible after perfusion in nutrient medium. In comparison to the effect of chloroform, which caused severe vacuolization, impaired pinocytosis, and cell death at lower concentrations (58.0 mg%), halothane must be considered to be much less toxic at clinically useful concentrations.

SENSITIZATION EFFECT?

The preceding studies appear to support the current belief that halothane is probably not a direct hepatotoxin but more likely acts through a mechanism of drug hypersensitivity. According to Griner,¹⁴ a sensitizing agent causes hepatic injury, which is unpredictable, is not dose related, has a variable onset after exposure, is not reproducible in animals, and is manifested in various laboratory and morphologic patterns. These characteristics are descriptive of halothane's association with hepatic necrosis.

Belfrage *et al*² reported a 32-year-old anesthesiologist who was exposed daily to small amounts of halothane for a training period of 3½ months. He was known to have spells of allergic rhinorrhea, but no history of hepatitis. At the end of July, 1965, he became ill with fatigue and nausea and soon developed dark urine and jaundice. His liver function findings included serum bilirubin (direct) 4.6 mg%, SGPT 1590 units, SGOT 555 units, SLDH 505 units, and alkaline phosphatase 10 Buseh and Busch units (normal 2-8). By the end of September, the jaundice had abated and all the laboratory data had returned to normal, except for 10% eosinophilia. On October 12, 1965, a short provocative exposure to halothane was administered to the patient. He felt well for the first five hours, but then fell ill with chills, nausea, headache, myalgia, and mild fever, but no rhinor-

rhea. His laboratory findings revealed serum bilirubin 1.3 mg%, SGPT 1500 units, SGOT 1555 units, SLDH 1060 units, abnormal BSP retention (31%), and normal alkaline phosphatase. After three weeks, the serum transaminase and BSP retention tests returned to normal, but a moderate eosinophilia persisted. This case report suggested an initial sensitization to halothane with recurrent reactions following drug provocation. The eosinophilia was suggestive of an allergic reaction. Klat-skin and Kimberg¹⁸ reported a similar case of an anesthesiologist, with a history of hay fever and asthma, who had relapses of hepatitis coincident with his return to work and reexposure to halothane. The biochemical, clinical, and histological picture was identical with that of acute viral hepatitis. Klat-skin pointed out that hypersensitivity reactions occurred in the order of 1:10,000 exposures in a few uniquely susceptible persons, but that anesthesiology had a definite occupational risk.

Studies of hypersensitivity and halothane eventually led to theories on the mechanisms involved. Popper *et al*²³ mentioned two possibilities: (1) genetic variations in drug metabolism and (2) an immunologically induced hypersensitivity. Conceivably halothane, acting as a hapten, could bind to a liver protein and form an immunologically stimulating complex demonstrable by fluorescent antibody techniques.

Rodriguez *et al*²⁴ detected anti-mitochondrial antibodies in seven of nine sera from patients with jaundice following halothane anesthesia. These adsorbed antibodies appeared identical to those found in primary biliary cirrhosis and chronic active hepatitis. Their presence was not found to correlate with the degree of hepatocellular damage. These antibodies were not detected in 20 patients with acute viral hepatitis (although they have been occasionally reported) or in patients with halothane anesthesia without the development of jaundice.

Several difficulties with the hypersensitivity theory have been brought up. Vickers *et al*²⁸ indicated that although hepatic necrosis frequently follows multiple exposures to halothane, several cases have been reported following single administrations. One case with a previous history of halothane exposure was reported in which liver injury followed an operative procedure where halothane was not even used. Herber and Specht¹⁶ concluded that hypersensitivity was an unlikely cause of hepatic necrosis since, in many cases, subsequent exposures to halothane did not result in jaundice.

OTHER CAUSES?

Without excluding the possibility that halothane may be directly associated with massive hepatic

necrosis, the other potential causes for liver damage must be constantly kept in mind. A list of causes would include impurities in halothane, other medications, surgical procedures and their complications, and preexisting liver diseases, including sepsis and viral hepatitis.

In 1963, Heidenberg *et al*¹⁵ expressed concern over the disparity in the reported cases of halothane "hepatitis" between the United States (19) and Britain (0). Up until January of 1963, England had been the source for halothane distributed to the U.S. Cohen¹⁶ suggested that there was a hepatotoxic, halogenated impurity in commercially obtained halothane which became more concentrated in the presence of copper. Interestingly, United States' vaporizers for anesthetic administration were made of copper, whereas English vaporizers utilized a nickel alloy. The national Halothane Committee reported that, in 1963, due to the manufacturing process, dichlorohexafluorobutene (DCHFb) in trace concentrations was found as a contaminant in stock preparations of halothane. The average concentration of this toxic impurity increased during storage and during administration in vaporizers. DCHFb was shown to induce hepatic lesions in rats and monkeys. Consequently, from 1965 on, halothane has been prepared free of this impurity.

A number of medications are known to induce hepatic damage. According to Robbins, direct hepatotoxins would include cinchophen, carbon tetrachloride and chloroform, and "hepatic allergens" (occasionally inducing hypersensitivity reactions) such as nitrogen mustard, methotrexate, isoniazid, para-aminosalicylic acid, sulfonamides, para-aminobenzoic acid, propylthiouracil, and tetracyclines.

The surgical procedures and their complications are extremely important considerations in evaluating the causes of hepatic necrosis. Episodes of shock, anoxia, and sepsis are known causes of liver necrosis and are associated with a characteristic histological picture. As previously mentioned, the National Halothane Study²⁵ revealed a higher incidence of hepatic necrosis following operations associated with high death rates. Griffiths and Ozguc¹³ in comparing the effects of chloroform and halothane anesthesia in man, found that there was no significant difference between these two agents in terms of hepatotoxicity.

There was, however, a significant difference between the liver function findings (serum bilirubin, SGPT, SGOT, and BSP retention) of patients on spontaneous ventilation as opposed to controlled ventilation, despite the anesthetic administered. Those on controlled ventilation showed significantly higher values, indicating liver function alterations were more related to the operative pro-

cedures than the anesthetics employed. Defalque *et al*⁹ suggested that perhaps halothane's hypotensive effect may have been a factor in the liver damage of hypovolemic patients. Moreover, Kirwan *et al*¹⁷ pointed out that any surgical procedure, regardless of anesthetic agent employed, induces a slight elevation in SGPT, which reaches a maximum elevation six hours postoperatively.

Perhaps the most important barrier to the confirmation of halothane's role in hepatotoxicity lies in distinguishing between viral and toxic drug hepatitis. Gall,¹² reporting from the Pathology Panel of the National Halothane Study, concluded that there is no unique hepatic lesion characteristic of halothane anesthesia. Babior and Davidson,¹ like others, have noted that halothane "hepatitis" is indistinguishable histologically from viral hepatitis. They attempted to make a clinical distinction by describing viral hepatitis relapses to be rarely associated with jaundice, usually preceded by bouts of activity, and usually prolonged for two to three weeks. On the other hand, drug-induced hepatitis is more frequently associated with jaundice, disappears with discontinuation of drug administration, and is correlated with exercise.

Vickers *et al*,²⁸ in a study of 22 patients who had had jaundice or liver damage after halothane administration, concluded that in no case was the illness incompatible with infectious hepatitis. The clinical picture (characterized by (1) a variable interval between symptoms and jaundice, (2) the syndrome of malaise, lethargy, shaking chills, mild pyrexia, and anorexia, and (3) the severity of illness independent of drug dosage), the biochemical picture of hepatocellular necrosis and biliary obstruction, and the histological picture with periportal inflammatory reaction, were all identical with those of acute viral hepatitis.

Statistically, too, it was shown that the number of "unexplainable" massive hepatic necroses was compatible with the incidence of randomly occurring infectious hepatitis. If the average world incidence of infectious hepatitis were 20 to 40 cases/100,000 population per year, and halothane was administered on 20 million occasions, then 4,000 persons receiving halothane could be reasonably expected to get infectious hepatitis. Perhaps the high local incidences reported in some studies were indications of infectious hepatitis spread to the patients by infected hospital staff.

Although cases of hepatic necrosis involved mainly older age groups and infectious hepatitis affected mainly children and young adults, Vickers noted that there was a trend, in Sweden and the United States, for viral hepatitis to involve older individuals. He gave further evidence that surgical procedures tended to have severely adverse

effects on patients with viral infections. Vickers concluded that among the differentials of massive hepatic necrosis would have to be included the possibility that halothane "hepatitis" was not a true entity but a manifestation of a preexisting viral hepatitis, aggravated by surgery or directly stimulated by halothane itself into a fulminant state.

Objections to a major role of infectious hepa-

titis in hepatic necrosis would include the older age group involved, the high mortality rate, and the relative rarity of hepatitis following other anesthetic agents. The ultimate problem in distinguishing between viral and drug-induced hepatitis lies in the absence of adequate laboratory techniques for isolating the viruses involved. Until this is resolved, a differential diagnosis cannot readily be made.

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COOPER HOSPITAL QUIZ

Archives of Internal Medicine (April) 1970

1. People who show marked allergy to bee, wasp and hornet stings usually have no other allergic history. TRUE or FALSE
2. Although uncommon, primary carcinoma of the duodenum is almost a uniformly fatal disease. The reason for this is probably that these tumors metastasize more rapidly than other carcinomas. TRUE or FALSE
3. Malignant tumors of the duodenum are more common than benign tumors. TRUE or FALSE
4. Going from the duodenum to the ileocecal valve, carcinomas decrease in incidence and sarcomas increase. TRUE or FALSE
5. Broad spectrum antibiotics are of no value in treatment of primary atypical pneumonia (caused by *Mycoplasma pneumoniae*). TRUE or FALSE
6. Patients who shed *Mycoplasma pneumoniae* (by culture) after antibiotic treatment are not ill any longer than patients who had negative post-treatment cultures. TRUE or FALSE
7. Although nafcillin sodium and oxacillin sodium have similar antibacterial spectra; given in equal doses nafcillin gives lower plasma levels than oxacillin. TRUE or FALSE
8. Apparently the reason for the difference in plasma levels between nafcillin and oxacillin is that renal clearance of nafcillin is remarkably higher than for oxacillin. TRUE or FALSE
9. Tuberculosis may produce changes in the blood that are difficult to distinguish from immunologic disorders. TRUE or FALSE

Answers will be found beginning on page 598

The Immunological Characteristics of Mongoose Blood

A Preliminary Study*

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● Eighty-four mongoose blood samples were submitted to immunohematological and serum protein analyses. Three serologically distinct blood groups (Group I, (27%); Group II, (40%); and Group III, (33%)) were established on the basis of the presence or absence of isoagglutinogens. A few sera contained heteroagglutinins against human group O cells. Thirty-four (41%) sera possessed anti-A B; 24 (29%) anti-A; and 1 (1%) anti-B specificities.

Serum electrophoretic analysis showed a great variation of protein patterns among the sera. Immunoelectrophoresis of serum revealed protein fractions, gamma globulin and transferrin, cross-reacting with human and other animal sera.

THE HAWAIIAN MONGOOSE (*Herpestes auropunctatus Javaiens*) was introduced to Hawaii in 1883 from Jamaica, West Indies, which had received its first importation in 1872 from Calcutta, India, to control the rat population in sugar cane fields. It has since become established on four Hawaiian islands: Hawaii, Maui, Oahu, and Molokai. It has never made any inroads at all into the rat population, so far as is known.

Information on the immunologic behavior of the mongoose is limited. Recently, however, it has been shown that the Hawaiian wild mongoose gives evidence of infection with leptospirae, tubercle bacilli, and schistosomes.¹ Nasal abscess, adenocarcinoma of the lung, senile arteriosclerosis, leukemia, carcinoma of the pancreas, liver cirrhosis, cystic degeneration of the thyroid, and papilloma of the urinary bladder have also been reported.² Meyer and his co-workers³ found that 12.5% of the mongooses in the Hamakua district of the Island of Hawaii, which is an endemic plague area, were positive reactors to the hemagglutination test for *Pasteurella pestis*.

Kuakini Medical Research Institute.

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In this study a blood group system and the serum protein patterns of the Hawaiian mongoose were investigated. Three groups, designated as Groups I, II and III, could be delineated by hemagglutination tests based on the presence or absence of isoagglutinogens or isoagglutinins in the blood samples. It was found also that some mongoose sera possessed heteroagglutinins against group O human red cells, whereas group-specific agglutinins for human group A or B cells, or both, were found in most sera.

Serum protein patterns of the mongoose differed somewhat from human serum protein patterns. Further study demonstrated that the serum fractions of the mongoose, notably gamma globulin, albumin and transferrin, crossreacted with human and some other animal sera.

MATERIALS AND METHODS

Eighty-four wild mongooses were trapped in the Honolulu area. Their ages could not be determined, but it was found that 62 were males and 22 were females. Under ether anesthesia, approximately 10 to 15 ml of blood was obtained from each mongoose by cardiac puncture. All samples were tested within three days following collection. The serum was collected after clotting the blood overnight at 5°C and the free red cells were suspended in saline. The red cells were washed three times with saline, resuspended to a concentration of 2%, and used for the agglutination tests. One ml of serum was inactivated at 56°C for 30 min for the agglutination study and the remainder of each serum was stored at -20° for electrophoretic and immunoelectrophoretic studies.

Direct saline hemagglutination tests were carried out by mixing 0.1 ml of serum with an equal volume of cell suspension in a small test tube (10 x 75 mm). The agglutination was read macroscopically after incubation at 25°C for one hour and centrifugation in a serologic centrifuge at 1000 rpm for one minute.

Two-percent suspensions of human red blood cells possessing O, A, and B antigens respectively

were prepared. Agglutination tests were carried out on mongoose sera by the same procedures described above. The sera were serially diluted by a two-fold system for the agglutinin titer. Group-specific agglutinins against human A or B cells or both were determined in the sera after absorption of any heteroagglutinins present with twice the volume of washed human O cells at room temperature.

Cellulose acetate electrophoresis was performed to determine the protein patterns of mongoose serum, using a Beckman microzone electrophoresis cell,* model R-100, with barbital buffer, pH 8.6, ionic strength 0.075. Each serum protein fraction was measured by a densitometer at 520 m. Total protein was measured by a refractometer (Hitachi, Japan).

Cross-reactivity of serum proteins between mongooses and those in human and other animal sera was studied by immunoelectrophoresis⁴ in agar gel. Specific antisera to whole human, bovine, porcine, equine, mouse, guinea pig, and chicken sera were obtained from Hyland Laboratories, Los Angeles, California. Rabbit anti-mongoose serum was prepared in this laboratory. A 1.25% of agar gel was prepared in barbital buffer, pH 8.6, μ 0.05. Six lambdas of the serum were placed in the well with a Hamilton† microsyringe after the agar solidified. Electrophoresis was performed at 5 mA per cm in the electric field. Antisera were placed into the troughs after electrophoresis. Precipitin patterns were analyzed by comparing the patterns of the mongoose serum with those obtained from the other animals.

RESULTS

The serum of one mongoose (No. 26) contained a naturally occurring antibody which agglutinated the red cells of 23 (27%) of the other mongooses. A few sera contained isoagglutinins for the red cells of mongoose No. 38 and also agglutinated some other red cells. On the other hand, 33 (40%) sera agglutinated red cells other than those of No. 38. The isoagglutinins were found in sera of specimens whose red cells were not agglutinated by serum No. 26. The remaining 28 (33%) blood samples did not possess either isoagglutinogens on the red cells or isoagglutinins in the serum. No blood sample was found to have both isoagglutinogens and isoagglutinins. Table 1 shows the classification of the blood group system according to the presence or absence of isoagglutinogens or isoagglutinins. This classification led to the definition of three serologically distinct groups.

* Spinco Division, Beckman Instruments, Inc., Palo Alto, Calif.
† Hamilton Company, Inc., Whittier, Calif.

TABLE 1.—Classification of blood groups of the mongoose according to the presence or absence of isoagglutinogen or isoagglutinin.

GROUP	ISOAGGLUTINOGEN	ISOAGGLUTININ	INCIDENCE
I	+	—	23 (27%)
II	—	+	33 (40%)
III	—	—	28 (33%)

As shown in Table 2, agglutination of human group O as well as group A and B cells was observed with 19 mongoose sera. However, only four sera had significant titers, ranging between 1:2 and 1:8. Thirty-four sera with no heteroagglutinins for group O cells agglutinated both A and B cells with titers ranging from 1:8 to 1:64, except for a few sera which showed a lower titer (1:2) with either A or B cells but not both. Twenty-four sera agglutinated only group A cells and one serum agglutinated only group B cells. The agglutinin titers of sera reacting with either A or B cells were similar (1:8–1:32) to sera reacting with both A and B. Five sera did not agglutinate either A or B cells.

TABLE 2.—Incidence of heteroagglutinins against human RBC.

NO. OF MONGOOSE SERA	AGGLUTINATION OF HUMAN RED CELLS		
	O	A	B
19 (23%)	+	+	+
34 (41%)	0	+	+
24 (29%)	0	+	0
1 (1%)	0	0	+
5 (6%)	0	0	0

Electrophoretic analysis of the sera showed great variations in the patterns of each fraction and each sample. Calculations made of the sera (63 cases) showed patterns comparable to normal human serum. The value of each fraction is shown in Table 3. In the albumin determinations, seven cases showed higher than 20% in the α_2 region ranging from 30 to 38; eight sera showed higher than 20% in the β region ranging from 20 to 25; and five sera showed higher than 30% in the γ region ranging from 30 to 33. The total protein was estimated at 6.4% by refractometer.

TABLE 3.—Average serum protein levels on cellulose acetate electrophoresis of 63 mongooses.

FRACTION	AVERAGE
Albumin	51.4
α_1	9.7
α_2	11.9
β	8.8
γ	18.2

TABLE 4.—Cross-reactive serum proteins among human and animal sera.

FRACTIONS	MONGOOSE	HUMAN	BOVINE	PORCINE	EQUINE	MOUSE	GUINEA PLG	CHICKEN
γ	+	+	+	+	+	+	0	0
Alb.	+	+	0	0	+	0	+	0
Tf	+	+	+	+	+	0	0	0

+: Reaction.
0: No reaction.

Antisera to human, bovine, porcine, equine, and mouse proteins produced a precipitin line with mongoose serum in the gamma globulin region comparable to IgG, while anti-guinea pig and anti-chicken sera did not show this line (Table 4). A cross-reacting albumin component was also found in human, equine, guinea pig, and mongoose sera while human, bovine, porcine, and equine sera contained a cross-reacting transferrin component.

DISCUSSION

The study reveals that mongoose blood can be divided into three groups according to the presence of isoagglutinogens or isoagglutinins. However, the classification on this basis is unreliable when employing the direct saline agglutination method because of the marked variation of reactions produced by one serum on different red cells, and on the same red cells by different sera. It is possible that the three groups delineated here are representative of a more complex interrelationship, and that further studies with immune antisera might reveal additional isoagglutinogens upon which classification could be based after immunizing with mongoose red cells. The lack of genetic studies in the mongoose family, it should be pointed out, prevents any study from being conclusive for the blood group.

Strong heteroagglutinins against human group O cells were found in a few cases and group-specific agglutinins against human A or B cells or both were also demonstrated in a pattern which resembled the ABO blood group system in man. The results indicated that the mongoose may have antigenic properties similar to the human ABO blood group substances.

Under wild conditions, the mongoose may have a variety of defense mechanisms against immunological stimuli. It was expected that they might

have elevated serum proteins, particularly gamma globulin, as an immune response. Pathological studies⁵ showed that several animals had large numbers of plasma cells in the spleen and mesenteric lymph nodes and that many of these cells, especially in the spleen, contained Russell bodies. The presence of these cells could not be correlated with any characteristic levels of globulin.

A great variation in levels of serum protein components was demonstrated by means of conventional electrophoretic analysis. In considering the findings in the study, allowances must be made for the fact that varied environmental factors could have affected the serum proteins, because the animals used in this study were randomly trapped in different areas of Honolulu. In addition, the presence or absence of isoagglutinins, heteroagglutinins, and human ABO-agglutinins, along with a variety of serum protein patterns, may be associated with the genetic strain or age of the mongoose, or both.

Immunoprecipitin tests revealed that mongoose serum possessed a common antigen with human, bovine, porcine, equine, and mouse sera in the globulin fraction. Cross-reacting serum proteins were also found in the albumin or transferrin regions with the sera of humans and other animals. It was demonstrated that the mongoose, as a species, showed much closer immunologic similarity (in terms of antigenic properties of serum fractions) to human and equine sera than to other animal sera used in this study.

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The President's Page



Medical Malpractice Insurance

Check your malpractice coverage! One general practitioner found his had lapsed a year ago and no-one had notified him. Several surgeons were recently notified by their agents, when their anniversary date arrived, that their company is no longer writing malpractice insurance in Hawaii. Several groups have been notified their carrier was dropping groups and only insuring members of the American College of Physicians. The problem is not unique in Hawaii.

The HMA is attacking the problem in two phases. Our immediate problem is to insure that physicians have coverage so that we can practice. Check your coverage! I am told that Lloyd's of London has a clause that states coverage (for past years) is only in force as long as you are still paying premiums. To many of us this would not seem like good coverage. To get even this kind of coverage, you must expect to pay higher rates.

Your committee (consisting of your President and Drs. Chinn, Frissell, Pavel, and MacDowell) has met with Mr. Miyoi, State Insurance Commissioner and Mr. Honda, Director of the Department of Regulatory Agencies. They are sympathetic and have requested information from us. This information is being obtained from the poll conducted by the HMA 10 days ago.

The long-range goal of providing comprehensive malpractice insurance coverage at reasonable rates is being studied by the AMA and by the HEW. We have had correspondence from Dr. Egeberg indicating his interest, and an offer of assistance, and phone calls from AMA.

Until this problem is settled may I suggest the following:

- Review your insurance policy.
- Make sure you do not have to continue paying premiums forever to maintain coverage for past years under your policy.
- Notify the HMA office of any notice of cancellation or non-renewal of your insurance.
- Please carefully complete any questionnaire we send you so we can assemble necessary information to correct this problem.
- Call the HMA office for information if you are having trouble renewing your insurance.
- And most of all, try to give your patients sympathetic, considerate, expert care so we can cut down the incidence of these claims.

John J. Lowrey

Medical Licensure

The problems of medical licensure are complex, and for the most part unsolved. Our absurd one-year residence requirement, which places a costly roadblock in the way of the competent and the incompetent alike, is a good example of how ineptly we have tried to solve them.

An almost equally serious problem—that of making it possible for competent specialists several years out of medical school to practice here, while excluding incompetent ones—has not been solved at all. Only if they happen (as many do not) to have the diploma of the National Board of Medical Examiners can they escape our requirement that they pass an examination covering every medical specialty in addition to most of the basic medical sciences.

Anyone who thinks all such aspirants to Hawaiian residence ought to be able to pass such an examination need only ask a doctor already here whether he'd like to have to take such a test every few years, or even once. The answer will be a loud and clear "No!"

Last July, Massachusetts enacted legislation to solve this problem. They have established four categories of physicians who may be licensed by the Board of Registration in Medicine without examination. They are as follows:

A medical officer who has 10 or more years of medical-service assignments in one of the United States armed forces or in the United States Public Health Service, and who, though not licensed to practice medicine in any state, has engaged in medical service while in such capacity and is a diplomate of any of the American specialty boards approved by the American Medical Association or the American Osteopathic Association.

A physician who is a graduate of a medical school outside the United States or Canada and who has been in the active practice of medicine in a foreign country or in another state for five or more years and who is a diplomate of one of American specialty boards approved by the A.M.A. or A.O.A.

A physician who is a graduate of a medical school outside the United States or Canada and who has been licensed to practice medicine in another state and who has actually practiced medicine in that state for five or more years.

A physician who is a graduate of a medical school outside the United States or Canada and who has been licensed in another state under an examination substantially comparable to that administered in Massachusetts and who has achieved a passing grade on such examination substantially comparable to the passing grade in Massachusetts.

The deans at Boston, Harvard, Tufts, and Worcester, and the chairman of the Massachusetts Board of Registration, supported the bill and its objectives, and the final version had the combined support of the state medical and osteopathic associations, the state hospital association, and the department of mental health. Such a bill should receive comparable support in Hawaii.

Specialty board examinations are so much more exacting in their requirements than any general state board examination that it is absurd to subject their diplomates to the latter at all; and by the same token there is no good reason why such specialists should be licensed to practice "medicine and surgery." They could well be licensed just to practice their specialty, whatever it might be—psychiatry, dermatology, general surgery, and so on.

We're already not "the first, by whom the new is tried." Let's try, now, not to be "the last to cast the old aside."

Malpractice Insurance Crisis

The risk of a suit for malpractice is an ever-present threat in the United States, where the contingency fee (or "champerty," as it's called in England and Canada, where it is not permitted) makes it easy for patients to initiate lawsuits even if there is little or no basis for them.

Though loss ratios on malpractice cases from 1962 through 1966, on 49 claims, averaged only 42.7% of premiums paid in—and in 1964 and 1966 amounted to only 17 and 17.5%!—the two companies which write most of the malpractice insurance in Hawaii have notified their clients that their policies will not be renewed.

The Honolulu County Medical Society's medical practice committee has stopped a good many unfounded suits for malpractice by reviewing the evidence and investigating the case, and making a report to the plaintiff's attorney.

They could stop more such suits if we made it our policy—as has been done by the Alameda-Contra Costa county medical society—to offer expert medical testimony to the plaintiff in malpractice cases in which they determine that the physician was actually at fault. We must not tolerate negligent or grossly incompetent medical practices.

Our executive secretary says that malpractice insurance can still be made available to us; we won't all have to retire in self-defense. But it may bear an astronomical price tag unless we can make common cause with the courts against doctors who are really in the wrong.

Since this is really the only strictly honorable course we could pursue anyway, how can we refuse to pursue it in our own interest? We cannot. We must not. It is the only plausible solution to the problem now facing us.

Numbers

I am a numbered man. Numbered by the H.C.M.S. and by the Bank of Hawaii; by the Military and by a Tax office here and a Tax office there. By Liberty House, the Kahala Hilton and my answering service, by GEM, T.D.I. and Time magazine. I need numbers to be paid and to pay others.

As in Caesar's day when he had the people numbered for his reason, we are still numbered for other peoples' reasons and so everybody can get at me, except in one vital situation: a medical emergency, when all these numbers will be of no use.

On this occasion one other number could be made beneficial to its holder. This is our Social Security Number, our number of social love and care. One can visualize a large personal medical information computer system, state, country, or even worldwide, containing vital information on us all. When we go to a doctor, our social security card inserted in a simple desk machine would activate the computer which prints out the information.

Since medical information regarding untold numbers of people is already available to the in-

surance world, the Military, Health and other authorities, we could take a realistic attitude towards our sacrosanct private knowledge of the patient. Moreover, the computer information can be divided into general and privileged, the latter requiring an addition code in possession of the patient only, and to be released by him.

Such a computer would be huge and expensive but the cost savings to the individual and the government probably could pay for the contraption. I think of a lady who—hold yourself—had 21, yes twenty-one, I.V.P.'s and D.S. expense in seven years, followed by two gallbladder series (first one by me), the removal of a gallbladder of sound and healthy appearance, and cured of her ills by the divorce courts.

It would be hard to evaluate the benefits of reducing needless repetitive exams, and we also would gain time to evaluate the emotional content of our patients' complaints.

After all this I still think of myself as number one, but in honesty have to sign,

Sincerely yours,

575-40-6819 ■



Hawaii Academy of General Practice

... OF SATURDAYS AND SUNDAYS.

Political campaigner Richard "Ike" Sutton had a good pitch: "Why wait for the year 2,000? Why not do things now?"

Agreed! We need solutions to the problems of overpopulation now; hopefully, current efforts will continue to be helpful in the next 30 years.

* * *

Traffic: Our biggest problem is in the distribution of proper utilization of facilities. Between the peaks of bumper-to-bumper traffic for two hours twice a day, the more than adequate streets, roads, and freeways are practically an invitation to leisurely driving.

Schools: Extra kids are jammed into "portables"; cafeteriums are bursting as long lines wait to eat lunch; the DOE is envious of the success of the "privates," and blind to the fact that private schools ease the burden of the DOE while contributing tax monies just the same. And yet, from 3:00 P.M. on, these lavish public facilities lie practically empty.

Parks & Beaches: These are packed with body-to-body and car-to-car for brief periods. Yet how peacefully empty (beautiful but littered) they are, particularly of a Monday morning.

Courts: Calendars hopelessly tangled and crammed on weekdays. On weekends, the peaceful abode of mice and cockroaches.

Government: Throughout, too busy for ordinary working citizens to be accommodated on weekdays—closed tight on weekends and after working hours.

Work: A quiet period, sandwiched between restless sleep and mad recreation, punctuated by traffic jams, compressed between exhausting and often hazardous weekends before and after.

Weekends: When most wars have started; when sickness usually hits!

* * *

Why wait until A.D. 2000? Let's start now. Let's start by abolishing the week! And, no better place to start comes to mind than in our hospitals, where the cost of a day's stay is rapidly climbing toward the century mark—in dollars, that is!

It is pretty well agreed that maximum utilization makes for lower unit costs. It makes no sense whatever, in these days of expensive X-ray, labo-

ratory, operating room and ordinary room and board costs in hospital, for a patient to lie in bed and wait, over a Saturday/Sunday weekend, or a holiday, before further studies or treatments can be continued. And yet, in every hospital in this state, if not in the entire country, hospital costs are being escalated by this long out-dated tradition. Unfortunately, the tab does not go to the patient; it goes to his insurance carrier. The latter, as an absentee landlord, can do nothing about it. It certainly is not the patient's fault that he has happened to come in sick just before a weekend. Neither is it the doctor's prerogative to upset the natural course of events. The administrator himself is stymied—by labor laws and traditions.

It is the *system* that needs changing! So, let's change it! Abolish the week. Make every day the same. Use 24 hours of each day and seven days of each seven, etc. Only two major changes in the basic philosophy of labor would be necessary: (1) Abolish "holiday overtime"; pay overtime only when it involves time spent at work over and above the usual 40 hours in any seven days; and (2) abolish pay differential for shift work.

Illness and injury follow no diurnal pattern. Operating rooms no longer require daylight through studio clerestories. Instead of jamming surgery schedules into a 7:30 A.M. to 2:30 P.M. rush, why not do an elective cholecystectomy at 3:00 A.M. if surgeon and crew are well rested and the appointment made in advance?

It is time we face up to the facts of modern living. We can no longer afford the luxury of leisure that permitted the entire village to take off the same day for a sabbath. Abolishing the week may even have a secondary benefit of spreading religion and the true meaning of a sabbath onto every day of man's living.

We in the profession, together with all our co-workers in hospitals and with the kokua of leaders in Labor and Management, could indeed immediately initiate a NON-WEEK. Just imagine if this idea "took," like a vaccination! It might spread to involve the entire community in all its phases of work and play. Life, well before we reach the second millennium, might become less mad and more evenly paced—if we had no more weekends! ■

J. I. FREDERICK REPPUN, M.D.

Occupational Hepatitis

In the past few years there have been several disturbing reports of outbreaks of serum hepatitis among personnel in renal dialysis units. In some of these outbreaks the mortality rate among those affected has approached 50%. Not surprisingly, physicians and nurses are becoming reluctant to work in these units, and some have in fact been closed down.

The source of infection appears to be the donor blood and blood products used during dialysis. Transmission appears to occur via small cuts or abrasions or probably, in some cases, by inhalation. Prevention seems extremely difficult, if not impossible, and in the opinion of some nephrologists the problem is of such seriousness as to preclude the continuation of large dialysis units.

Serum hepatitis among the staff of dialysis units appears to be a new occupational disease, and is truly a disease of medical progress.

Hot Kidney

Every medical student is taught that one of the unusual causes of a puzzling pyrexia is an occult renal carcinoma. Some 10 to 20% of patients with renal carcinoma have fever, which, interestingly, usually disappears once the affected kidney has been removed, unless there are widespread metastases.

The reason for this association of fever with a renal neoplasm is unclear, but some light has recently been shed on the subject by the work of Rawlins, *et al* (*Lancet*, June 27, 1970).

Two febrile patients with renal carcinoma had the affected kidney removed and an extract of the tumor prepared. Injection of this extract into rabbits produced a marked febrile response. No fever was observed following injection of similar

extracts from a normal kidney or from the tumor of an afebrile patient with renal carcinoma.

It would appear that the tumor cells of some patients with renal carcinoma can elaborate and release pyrogens and may be classified as functioning tumors.

Man and His Environment

Ecology is now the catchword and everyday the news media tell us how we are irremediably polluting and destroying the environment. Occasionally, of course, the environment fights back, spectacularly destroying a few people by such natural disasters as earthquakes, tidal waves, and volcanic eruptions.

Sometimes Mother Nature may move against man in more mysterious and subtle ways, as was recently observed in southwest England. In the summer of 1968 this area was stricken by torrential rains, followed by devastating floods, with extensive damage to property and personal belongings. A few persons were drowned, but most survived with no apparent ill-effects.

After the flood water subsided and normalcy was restored, a most interesting and rather frightening thing began to happen. Those persons whose homes had been flooded and damaged began to die much younger and in larger numbers than their more fortunate neighbors. These flood victims also showed a higher incidence of serious illness over the subsequent twelve months, even though at the time of the flooding they showed no apparent injury. The reason for this higher incidence of death and disease is obscure, but it does illustrate that a close and subtle bond exists between man and his environment and that any disruption of this relationship may have far-reaching and unforeseen consequences. ■

W. PHILIP JONES, M.D.



University of Hawaii

One of the objectives envisioned in the founding of the University of Hawaii School of Medicine was the extension of medical teaching to promising candidates from communities that lie within or bordering upon the Pacific Ocean. The school has attained this goal singularly this year with the admission of 10 special students in addition to the regular complement of 41 in the first year class. An HEW grant supplies increased classroom space as well as tutorial assistance for these 10 scholars. It allows assistance to Pacific students who may not have had the most sophisticated pre-medical preparation. These 10 "Dean's Guests" will be permitted to finish the 2-year course in three years, but must maintain the same academic standards as those enrolled in the regular 2-year program. Additional faculty employed as tutors for this program include the following: **Dr. Nadhipuram V. Bhagavan** in biochemistry and medical technology, **Dr. William Bolman** in psychiatry (arriving in January, 1971), **Dr. Nabil Rashad** in genetics, and **Dr. John Eric Holmes**, in neurology. The latter grew up in Honolulu and is well known to many here. At the University of Southern California, he has won the respect of students as a teacher in neurophysiology and neurology. His research interests in memory and learning mechanisms have led him to develop a telemetry unit to record brain waves at a distance and to attempt to correlate EEG from

limbic system areas with learning particular behavioral tasks. Dr. Rashad has done work in human cytogenetic abnormalities and dermatoglyphics and has recently worked at University College, Dublin, Ireland.

Expecting to attend the meeting of the Association of American Medical Colleges in Los Angeles, Oct. 30–Nov. 1, are Dean **Windsor Cutting**, Professors of Medicine **N. L. Gault, Jr.**, **Kenneth D. Gardner, Jr.**, and Assistant Dean **John McNeil**.

The Department of Pathology has acquired an electron microscope, and the Hastings H. Walker Library is the recipient of *The Badianus Manuscript*, a reprint of an Aztec Herbal of 1552, a gift of Mrs. Eric A. Fennel, whose late husband was an outstanding pathologist in Honolulu for many years.

Remodelling of one of the Leahi wards is contemplated soon in order to house the N.I.H. Virology Laboratory directed by **Dr. Leon Rosen**.

In response to a request by the most recent session of the legislature, a study of the feasibility and cost implications of a 4-year medical school will begin on October 25, when four experts from outside of the State will make the first of several evaluation visits. The panel includes **Drs. Robert Morrison, Walsh McDermott, James Perkins**, and **Rashi Fein**. ■

P. W. HONG, M.D.
C. S. JUDD, JR., M.D.

• This 44-year-old Hawaiian man had had chills and fever and has raised about one-half cup of blood-stained mucoid sputum daily for the past four weeks. He had lost about ten pounds in weight over the last three weeks.

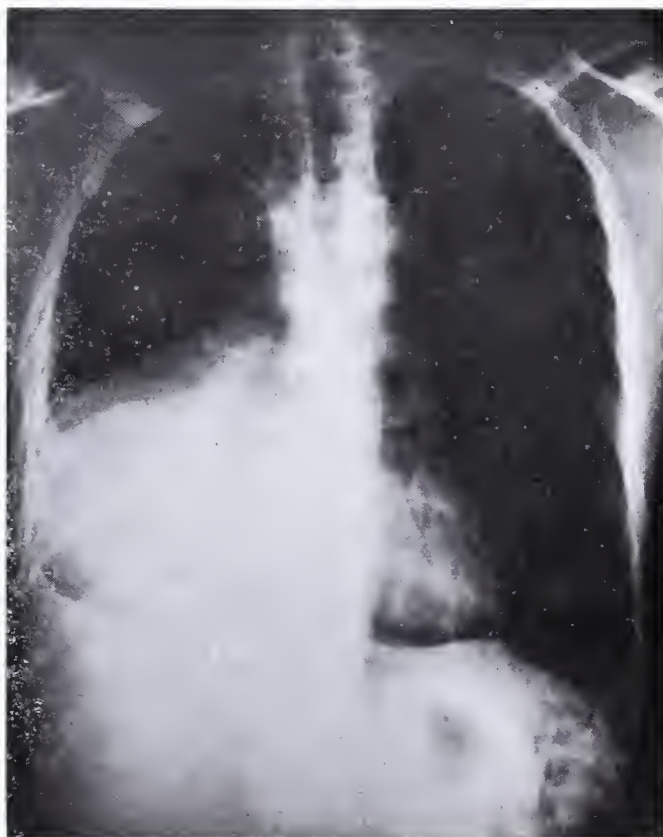
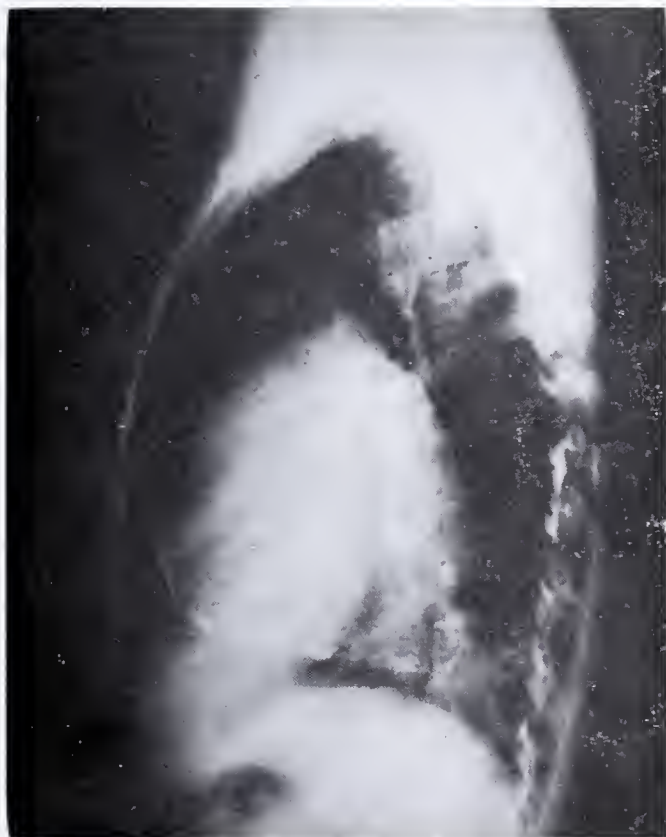
• He was hospitalized from age four to approximately eleven, for pulmonary tuberculosis.

• Yearly chest roentgenograms since then had showed no evidence of recurrence and the patient had been apparently in good health until onset of symptoms.

• Roentgenograms show a large mass in the right lower thorax.

• What is your diagnosis?

• Answer is below.



A thoracotomy revealed a large empyema cavity with a thick calcified wall. No acid-fast bacilli were demonstrated and the exact etiology was not determined.

Submitted by
RADIOLOGICAL SOCIETY OF HAWAII
D. R. GRININGER, M.D. ■

This is the eighty-sixth installment of In Memoriam—Doctors of Hawaii.

Charles Davidson

Charles Davidson, a native of Michigan, born in 1859, came to Honolulu aboard the S.S. "Australia" in August, 1890.

A few days after his arrival he was on his way to Lahaina, Maui, where he had accepted the position of government physician. In July, 1896, the doctor was accused of being so intoxicated that he was unable to attend a patient. Dr. Davidson denied the charges, but the Board of Health asked for his resignation. By November the Board of Health had received a petition from Lahaina with 128 names, asking that Dr. Davidson be reinstated, and in December he was reappointed, effective January 1, 1897. He held this position until he left Maui.

During the cholera epidemic of 1895 Dr. Davidson prevented any freight from being landed at Lahaina and led a drive to clean up all the rubbish in the town. Through his efforts there was not one case of cholera in Lahaina. He also saw the people of Lahaina through the plague epidemic of 1899-1900, and epidemics of dengue fever. He did complain, however, in a letter written in June, 1903, to the Board of Health, that he wished the government would do something against the Christian Scientists who "are doing great harm in this district and whose leaders are fanatics and are rapidly demoralizing our Hawaiian people."

Dr. Davidson was an enthusiastic baseball fan and the owner of the Ilimas, who were undefeated on Maui.

The doctor was married and the father of two children.

Sometime in 1910 or 1911 the doctor and his family left to settle on the mainland. Nothing further is known about him except for an item in the "Star-Bulletin" of July 14, 1928, which reports that an article on Hawaiian herbs used by kahunas written by the *late* Dr. Davidson was being reprinted in a Queen's Hospital Bulletin. This meager information gives us our only clue as to his death. Research is further complicated by the fact that Davidson is spelled both with and without the second "d."

Joao Pinto

Joao Pinto, born in Portugal about 1876, was a graduate of a college in Oporto and received his medical degree from the Faculdade de Medicina de Lisbon, Portugal, in 1903.

Shortly after graduation he joined the Portuguese Navy as a surgeon. Early in 1905 Dr. Pinto, who had been stationed at Macao, stopped off in Honolulu on his way to his next post in Africa. Contrasting the pleasant climate of the Islands with the conditions he could expect in Africa, he decided to remain in Honolulu. He was licensed to practice in the Territory in March, 1905, and opened an office on Miller Street. This office was near Hugo Herzer's Music Studio, and the doctor found that Mr. Herzer's pupils did nothing to add to his love of music and soon moved to Alakea Street.

Since Dr. Pinto had left the Navy without the formality of being discharged from the service, the Portuguese government, understandably, considered him a deserter. Dr. Pinto's father and influential friends tried to get him pardoned but were unable to gain any concessions from the government.

Although the doctor had many patients among his fellow countrymen, payment for his services was very slow, and he finally decided to leave. While he was in Honolulu he was surgeon of the Court of Cameos, A.O.F., when it was first organized in 1905, and was elected medical examiner for the Young Men's Institute, Damien Council No. 563, in December, 1905. At the Floral Parade in February, 1906, the doctor won a special prize for his carriage drawn by two ponies and decorated with blue and white rosettes.

Leaving Honolulu sometime in 1906, the doctor let it be known that he was going to Portugal, when in fact he went to Paris, knowing that if he were to return to his native land he would be arrested. A story in the "Advertiser" for May 8, 1907, recounts the doctor's adventures and tells of his leaving Paris to go to Brazil. A quote from a Rio de Janeiro paper gave Dr. Pinto's impressions of Hawaii and voiced his dislike of the Japanese laborers, saying that they were "insolent, haughty, getting high salaries, and causing strikes."

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... Telling It Like It Is

About a year ago, Cesar DeJesus, then chairman of the Public Relations Committee, asked me to write this column to let the members of the Hawaii Medical Association know what the Association is doing. HMA functions mostly through committees. Before I got involved in this, I was aware that HMA had some committees—but I didn't suspect how many. I assumed that they met once in a while and that they took some actions now and then, but I never heard till year's end what any of these actions were. I imagine you have all listened to some of the sterile annual reports of these committees, but I'll bet that most of you have been almost as ignorant as I was of what really goes on inside your association.

To date, I have been simply reporting the bare facts without comment. I now plan to attempt to interpret more and comment more. I see evidence of a lot of "wheel-spinning"—a lot of wasted hours by doctors gathering around a conference table and talking about nothing. I see a lot of good work. I see a lot of opportunities lost. In describing these, I shall try to avoid personalities, but I intend to attack error, nonsense, and wasted motion inside HMA.

The Communicable Disease and Immunization, Venereal Disease and Tuberculosis Committee (horrible name, isn't it? Can't we shorten it?) discussed the recent hepatitis epidemic on Maui and especially the need for more cooperation between the Department of Health and the medical societies. How about it, Dr. Hirsehy?

Sixty-five percent of all new TB cases in Hawaii are foreign-born, and have been in Hawaii less than two years. Spot checking has turned up many patients whose repeat x-rays did not match their pre-immigration x-rays. Are you aware that in countries abroad, there is a black market in x-rays? Healthy individuals get x-rays taken 30 or 40 times, then sell the films to prospective immigrants who can't enter the U.S. without a negative chest x-ray. It is time we demanded that the U.S. Immigration Bureau take its own x-rays, either abroad or here, not depend on a hand-carried x-ray. Until that time, though, x-ray all recent immigrants.

Many times, the first "medical representatives" on the scene are the ambulance personnel. Do you know that there still is no program of standardizing the training of these individuals? Most of them know little about cardiopulmonary resuscitation. These men have more opportunity to resuscitate than you and I. Shouldn't they all have a course before being allowed to roll the ambulance? A new ordinance to do something about this for Oahu has been with the Mayor's Corporation Council since last fall and nothing has been done about it. The **Heart Committee** is talking about it. What do you plan to do about it, Heart? Perhaps you had better consult the **Legislative Committee**. After all, it is a statewide problem.

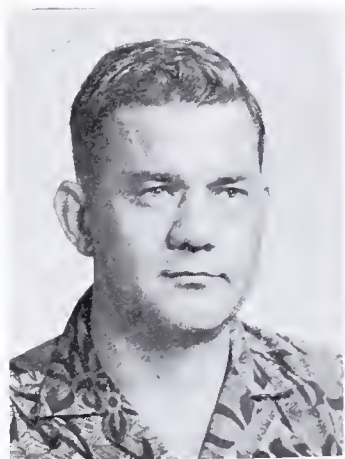
The **Woman's Auxiliary Committee** is one we could do without. The only meeting it held in the last year was a discussion of whether it should be abolished. It decided not to commit suicide, which is an understandable error. Students of bureaucracies know that useless branches have to be trimmed off by force—they can't be expected to wither away, as each of us will labor to find justification for his own position and work.

Water Safety discussed a subject close to my heart. The answer to the shark problem is to return to catching sharks as a game fish and eating them. The old Hawaiians relished shark meat—it is an excellent food. Haole prejudice stopped that, and it is high time we did what we could to overturn that ridiculous nonsense. As I said, the committee discussed it, but there is no evidence that they intend to really do anything about it.

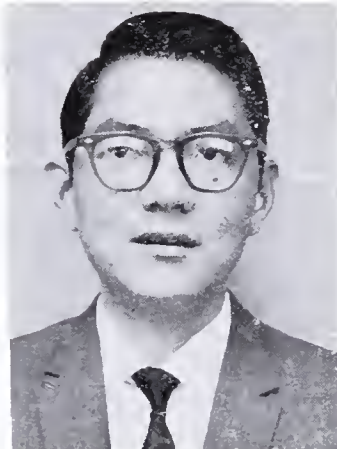
News Media is still dillydallying about rewriting our outdated "Joint Code of Cooperation" dealing with our relations with the newspapers and TV and radio stations. As a member of that committee, I hereby resolve to take my own criticism to heart and push for some action on updating this.

The **Public Relations Committee** is taking a long hard look at our public relations situation, especially in view of the recent retirement of Hugh Lytle, who has helped us so much over the years. Since we need someone to replace him, it seems an appropriate time to discuss what kind of public relations setup we need today and

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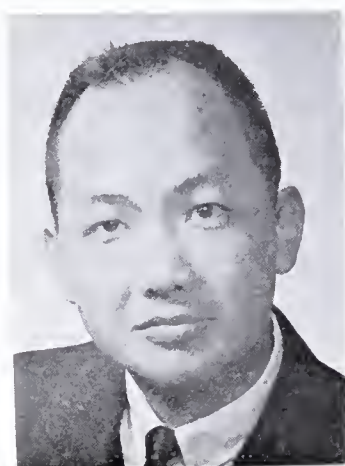
Ray Franklin Allen, M.D.
839 South Beretania Street
Honolulu, Hawaii 96813
ALLERGY & PEDIATRICS
University of Oklahoma School
of Medicine—1960
Internship—Tripler U.S. Army
Hospital—1960-1961
Residency—Fitzsimmons General
Hospital—1963-1965
L. A. County Hospital—1968-1969
(Pediatric Allergy)



Robert T. Ogawa, M.D.
880 Kam Highway
Pearl City, Hawaii 96782
PEDIATRICS
Columbia, College of Physicians
and Surgeons—1964
Internship—Los Angeles County
General Hospital—1964-1965
Residency—U.C.L.A. Medical
Center—1967-1969



Yoshio Oda, M.D.
1007 Akoko Lane
Honolulu, Hawaii 96814
INTERNAL MEDICINE
ALLERGY-IMMUNOLOGY
University of Chicago School
of Medicine—1959
Internship—University of Chicago
Clinics—1959-1960
Residency—Queen's Hospital—
1962-1963
Long Beach V.A. Hospital—1963-1965
University of Colorado Medical
Center—1967



Wilfred T. Tashima, M.D.
1697 Ala Moana Blvd.
Honolulu, Hawaii 96815
SURGERY
Boston University School
of Medicine—1962
Internship—Boston City Hospital—
1962-1963
Residency—Boston City Hospital—
1963-1964
Boston City Hospital—1966-1969



Edward A. Ballerini, M.D.
101 Hualalai Street
Hilo, Hawaii 96720
OBSTETRICS-GYNECOLOGY
University of Padua, Padua, Italy—
1965
Internship—Monmouth Medical
Center, N.J.—1965-1966
Residency—Gorgas Hospital,
Canal Zone—1966-1969



Thomas H. Maeda, Jr., M.D.
1481 S. King Street, Suite 527
Honolulu, Hawaii 96814
OPHTHALMOLOGY
Baylor University—1962
Internship—Queen's Hospital—
1962-1963
Residency—Louisville General
Hospital—1965-1969
Fellowship—University of California
Medical Center,
San Francisco—1969-1970
(Ocular Pathology)

COUNCIL MEETING

July 24, 1970 — 5:00 P.M.

Mabel Smyth Conference Room, 2d Floor

PRESENT

Dr. John J. Lowrey, presiding; Drs. Batten, Chinn, Dang, Frissell, Helms, Iaconetti, Mills, Sloan, Tomita, plus DeJesus, Goto, Lee, Omura, Sia, and Uehara and Mrs. Harold G. Lawson.

MINUTES

ACTION:

It was voted to accept the minutes of April 3, 1970, as circulated.

COMMUNICATIONS NOT REQUIRING ACTION

Reports by Dr. West: Dr. West represented the HMA at the Fourth National Congress on the Socio-Economics of Health Care in Chicago in March, 1970. He submitted two reports: (1) 4th National Congress on the Socio-Economics of Health, and (2) Physician Support Personnel in the 70's: New Concepts. The reports were circulated and reviewed.

ACTION:

It was voted to thank Dr. West for a complete and comprehensive report.

Correspondence from Dr. Beverly C. Payne: Dr. Payne has proposed to the four participating hospitals in the HMA study a three-day seminar in January or February in which the data would be presented and this problem-solving activity both learned and experienced by some 25 articulate leaders in the HMA.

Dr. Lowrey advised the Council that he will get more clarification of this and report back at the next meeting.

Report on Committee Structure: Dr. Lowrey reported on various committees which have not been functioning. Those discussed are as follows: (1) Ad Hoc Committee on Community Health Services: Dr. Lowrey reported that this committee was developed due to a resolution submitted by the Honolulu County Medical Society and approved by the House of Delegates. Six guidelines were developed for this committee and were submitted to the HMA. It was recommended that the six guidelines be circulated to the Council before action is taken on the matter. This committee was set up but was not active. (2) Environmental Health: The Council was asked if it felt that such a committee is necessary. It was brought out that it is imperative for the medical profession to take the lead in this area rather than leaving it up to allied health groups. It was recommended that the Environmental Health Committee be formed. (3) Health Manpower Committee: Dr. Lowrey reported that after discussions with the commissioner and committee chairmen, he has merged the Nurses' Liaison Committee and the Health Manpower Committee. (4) Peer Review Committee: This committee has been added under the Commission on Medical Services and Dr. Lowrey stated that committee membership is spelled out in guidelines accepted by the Council February 6, 1970; namely, Chairman of Medical Care Plans, Commissioner on Medical Services, and one member of each of the County Peer Review Committees.

COMMUNICATIONS REQUIRING ACTION

Correspondence with Miss McCaslin: The Council was circulated correspondence between the HMA and Miss McCaslin re her vacation time, health insurance coverage, Oahu Country Club Transferable Membership, and resignation. HMA's legal counsel's opinion was circulated and reviewed.

ACTION:

It was voted to accept the legal counsel's advice. It was recommended that a letter be written to Miss McCaslin re the Legal Counsel's advice.

Correspondence from SAMA: A letter was received from the President of the Hawaii Chapter, Student American Medical Association, outlining some of the projects they have planned for the coming year. No funds were requested; however, it was recommended that the President of SAMA, Hawaii Chapter, be asked for its budget.

It was reported that the HCMS Membership Committee has categorized medical students and will accept them into the Society. They will be able to attend all meetings without voting privileges, and their dues will be waived.

REPORT OF THE SECRETARY

ACTION:

It was voted to approve the Secretary's Report.

REPORT OF THE TREASURER

ACTION:

It was voted to approve the Treasurer's Report.

REPORTS OF THE COMMISSIONS AND COMMITTEES

Finance Committee: The Finance Committee recommended to the Council that a Common Fund Operation of the HMA and HCMS be established and that the non-separable items be divided on a 50-50 basis. The report was circulated, reviewed, and discussed by the Council. The Council was advised that the Board of Governors of the HCMS approved this matter.

ACTION:

It was voted that the Common Fund Operation be approved and that the nonseparable items be on a 50-50 basis which is to be reviewed after one year's experience.

It was suggested that a progress report be made to the House of Delegates at its next meeting.

Commission on Education & Scientific Research: Dr. Lee reported that the Publications Committee met and have the following recommendations: (1) That there be a 50 per cent increase in advertising rates. (2) That an individual be hired to be an editorial assistant to the HAWAII MEDICAL JOURNAL and to also take on HMA projects as directed by the Executive Director. (3) That an Assistant Editor be appointed.

ACTION:

It was voted to approve the recommendation

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Visiting Physicians

We have recently been blessed by some of the most outstanding visiting professors ever to lecture in these parts. . . . By far the most striking was **J. Alex Haller**, the Robert Garrett Professor of Pediatric Surgery from Johns Hopkins. Alex, tall, eloquent, and organized, has nary a hair on his scalp or face (a perfect cue ball). With rather pointed ears and sharp features like an overgrown leprechaun, Alex reminds us of Yul Brynner in *The King and I*. Yet his meaty lectures and friendly repartee quickly make one forget his physical appearance. During his lecture on indications for splenectomy, he categorized conditions for splenectomy as "Clear Cut," "Less Clear" and "Doubtful." And if Alex had seemed oblivious of his total alopecia, we were never so wrong, for at this point he commented, "My medical conferees feel that surgeons still are in the era of the barber surgeon, but I certainly don't have the physiognomy to go along with the concept of a barber surgeon!"

For two weeks in August, **Richard Winkelmann**, Professor of Dermatology from Mayo Clinic, gave well-attended lectures chock full of the latest and well illustrated with slides and statistics; he covered from the sublime to the earthy with equal facility; i.e., from dermatomyositis, scleroderma, and histiocytosis X to non-bacterial pyodermas and atopic dermatitis. "Wink" (as **Dan Palmer** calls him) looked the typical All-American boy, with barbered hair, clean shaven, ruddy complected, and over 6 feet tall; he spoke with a well modulated voice in an unhurried manner, and never had to grope for an explanation or an appropriate expression. Wink was always immaculately dressed and sported a large hand-tied, polka dot bow tie, reminiscent of Michigan's Governor Soapy Williams. At the conclusion of the lecture series, Queen's Medical Director **Jim Orbison** referred to him as "A personification of scientist, teacher, and clinician." Fellow dermatologists **Dan Palmer** and **Harry Arnold** echoed his praises. . . .

The Visiting Professor of Pediatrics at Children's Hospital for July and August was **Arnold Gould**, pediatric neurologist from Columbia. Arnold, a hulking giant with a (literally) large head, is dynamic and effusive and has an inherent sense for theatrics: he sported grey-streaked hair cut long and curled at the nape of his neck and never needed a microphone because his booming voice could be heard down the corridor even with the doors closed. Arnold reminded us of Orson Welles in appearance and in action. When lecturing on minimum brain damage, he confessed, "I'm not here because I am a well coordinated animal. . . . I have a motor coordination defect. . . . When I was a child playing baseball, I was always the last to be chosen on a team. . . . I decided early in life that I would have to use my cerebral function. . . . To compensate for my writing disability, I have a dictation machine in every room. . . . I once spent a month at Eldorado with Chi Chi Rodrigues and took lessons morning and afternoon. After one month, Chi Chi said to me, 'I've managed to teach every one, included very old ladies, but you've certainly been the worst. . . .'" At this point, **Henry Yim** whispered to us, "Any person playing golf five years and not breaking 100 may be considered minimum brain-damaged." (Henceforth known as Henry Yim's Law.)

Other "Goulden" quotes: re minimum brain damage . . . "We can all make the diagnosis, but it is the therapy that counts. . . . Like my mother never went to a PTA

meeting, but she always said, 'You can do anything you want, but just come home with A's'."

- re idiopathic seizures: "It only means that the doctor is stupid."
- re Sunday morning seizures: "The parents go out and booze it up so they sleep to 2 or 3 in the afternoon and the child has a hypoglycemic seizure."
- re a colleague who had fallen: "When you become a great physician, you stop practicing medicine and become an administrator."
- re Zarontin in petit mal: "In the U.S., we make only these massive gelatinous adult capsules. You know what the biggest black market between Europe and the U.S. is? It is not opium. It is Zarontin in pediatric suspension. . . ."
- "When I learned that Chinese is read from right to left like Jewish, I decided that China was the lost continent of Israel. . . ."

From the files of **Edgar Childs** . . .

Two boys found a large dead animal on the roadside and decided to bury it. Along came a minister so they asked him what kind of animal it was and the sage interpreter for heavenly edicts explained, "Boys, according to the scriptures, it is an ass." Satisfied, the two youngsters were busy at their labor when along came a flighty matron, "Oh, are you boys digging a fox hole?" Came the forthright reply, "Not according to the scriptures, ma'am."

Catalino Cachero's 19th Hole Repertoire . . .

This guy had a few drinks and was having a miserable golf game. Everytime he missed a shot, he yelled, "God-damn!!" A nun happened by (we were wondering what a nun was doing on the course, but that's beside the point) and cautioned the golfer, "Be careful, you will be punished by Up There." But the fellow continued to swear, whereupon the heavens suddenly darkened and a bolt of lightning streaked down and struck not the man, but the poor nun, dead. . . . Came a voice from above: "Goddamn! Missed!"

A good woman golfer joined the Waialae Country Club and being a proficient player soon became woman's club champion. Trying for newer pastures, she then joined the Oahu Country Club and likewise soon became its club champion. Thereupon she was crowned "Intercourse Champion". . . .

Life in These Parts . . .

The *Hawaii Tribune Herald* runs intriguing headlines, e.g. "Kona MDs Press Burns On Hospital." (We thought a printing press owned by Kona physicians had burned on the hospital premises, but then we learned that Governor Burns was being pressured by Kona physicians for a better hospital). A later issue headlined the following: "Burns Told of 'Overcrowded,' 'Incapable' Kona Hospital."

The *Maui News* was up in arms about the State Health Department trying to confine hepatitis to the Banana Patch (our infamous hippie haven at Peehi) where Maui Police officers recently maintained around-the-clock watch. The paper decried the cost of providing extra police watch with the headline: "Quarantine Continues; 'Watch' Costs \$2,500." When **John Withers**, Maui physician, announced that **Lloyd Guthrie**, our newly appointed state epidemiologist, had proposed

a moratorium on luaus because one food handler with hepatitis could expose 100 or more persons, the indignant *Maui News* came out with this editorial comment: "Incredible!!! Cancel luaus in the middle of an election season?" (Simply unheard of!)

Eddie Sherman reports: "Things can't be all bad in Moscow. A haircut and shampoo cost **Dr. Richard You** 80 cents, he says. . . ." "**Dr. Mitchell Eli's** daffynition of an auto junk yard: Happy honking ground. . . ."

Dave Donnelly says: At Kaiser Medical Center's waiting room for fathers, a sign posted reads: "Welcome to Kaiser Foundation Heirport." Dave also reports: "When Arthur Murray's wife, Kathryn, was operated on this morning at Kapiolani Hospital, her good pals, **Dr. George Ewing** and **Dr. Don Jones**, looked on, but her surgeon, **Dr. C. C. McCorriston**, refused to let either of them cut in. . . ."

In this age of stodgy technical medical reports, we received this simply delightful comprehensive report from our patriarch of pediatricians, **Don Marshall**, who wrote: "Well, Dale returned this A.M.—well rested; and we had a long conference during which we 'communicated' well. I feel that I got to 1st base with him. He was willing to return again this week to try for 2nd and 3rd base—later, possibly, to make it 'home.' . . . I feel that he is a relatively intelligent individual and is probably a rather 'spoiled' only child. He, however, has been associating during the past year with a 'now' group and has been led astray. . . . I hope that we can get him back 'on the track' so that he can take advantage of his talents and his opportunities. . . ."

Conference Humor

Dialogue from a Queen's medical conference on gastric lesions: Semi-retired but ever dogmatic surgeon **Joe Strode** "strode" forth with voice quavering, but head held high as he squelched all medical treatment for gastric lesions. "The treatment of gastric lesions is surgery. . . . I don't know of any operation in the abdomen which is so satisfying. . . . My friend here (referring to gastroenterologist **Doss Durden**) says 85 to 90%, but most gastroenterologists say they can make a diagnosis in 100% of cases. . . . I am against any medical treatment of ulcerative lesions of the stomach. . . . The operation is so satisfactory and so well tolerated. . . . I would like to hear anyone propose any good medical treatment." **Doss Durden** took his stand: "I think the internist and surgeon see different populations. . . . On a patient with a small gastric ulcer who drinks 10 cups of coffee, gulps aspirin, and has constant stress, I would be willing to temporize. . . . I would watch three weeks, no longer, and in a hospital and rigidly. . . ." **Joe Strode** spake: "In the hour that ye know not. . . ." **Doss** attempted a rebuff with: "Anyway, that's how I would like to have my gastric ulcer handled. . . . What about your surgical morbidity?" **Joe** replied, "I don't know of any patient who had a dumping syndrome."

Carl Boyer, who moderated the session, described a 1 to 10% 5-year survival of gastric cancer, but **Jim Orbison** quickly added, "But virtually zero, once a patient becomes symptomatic." **Harry Arnold** offered that radiologists should describe a gastric ulcer as "ulcerative gastric lesion, possibly malignant" rather than "probably benign."

At another Queen's medical conference, venerable syphilologist **Sam Allison** reviewed the treatment of VD with a retrospectoscope: "In 1938, with the advent of the sulfas, I made the mistake of writing a paper, 'Exit, Gonorrhea!'" Our present philosophy at the Kapahulu Clinic is, "In case of doubt, get a diagnosis and treat adequately, i.e. full dose and adequate treatment at the outset. . . . The only trouble we have had thus far was with a resident of the Kahala Hilton who insisted on prophylactic treatment because he had had sex in Hong Kong the day before." Regarding homosexuals, **Sam** related, "Some of these female impersonators are in-

teresting. Even Phyllis, our nurse with 25 years' experience at the Clinic, nearly had one of these fellows up on the stirrups. . . ."

Harold Johnson reviewed the false positives in VDRL, such as lupus, dysproteinemia, leprosy, malaria, and infectious mono. "Twenty years ago, **Harry Arnold, Jr.**, stepped me in the corridor and showed me some typical mucous patches in his mouth. **Harry** asked, 'What do you think?' Fortunately it turned out to be infectious mono." While showing a slide of *Treponema*, **Harold** was ecstatic: "I don't think anything is more thrilling to a syphilologist than to see *Treponema* spirochetes in a dark field. . . ."

Professional Moves

The migratory instincts of *Homo Sapiens Medicus* is traditionally apparent during the summer months. In June, pediatrician **Emiko Sakurai Hirschy** associated with the Phil-Am Medical Associates, at 1300 Pali Highway and at 94-300 Farrington Highway, Waipahu, OB man **Hamilton Winston** (with a name like that, how can you lose?) associated with the Windward Medical Center, 407 Uluniu Street, Kailua.

In July, **Fumiyo Sugimoto** moved to the Leeward Clinic, "Aiea, Hawaii" (we hope she means Oahu). Internist **Danilo Canete** and dermatologist **Paul Snnahara** associated with the Fronk Clinic; pediatrician **D. Venu Reddy** associated with the Honolulu Medical Group at 4614 Kilauea Avenue, Honolulu; ophthalmologist **Thomas Maeda, Jr.**, opened at Suite 527, Professional Center Building; psychiatrist **Leigh Sakamaki** relocated to Suite 618, Ala Moana Building; and internist **Ernesto Orinon** associated with **Joe Nishimoto** and **Ed Kagihara** at the Pearl City Medical Building.

On Maui, pediatrician **John Briley** and orthoped **John Behnke** joined the Maui Medical Group, **Jose Romero** moved to 99 S. Market Street, Wailuku, and **J. Alfred Burden** had "the pleasure of announcing that he will continue his private practice of medicine at his present location in the Maui Clinic Medical Building."

Michael Irwin, a Hilo-born psychiatrist, became chief of the Big Island's Mental Health Service, a position that had been vacant for over a year, mainly because "he wanted to get away from the population density of a place like Oahu."

Willis Butler, one of Hawaii's most outspoken protesters of the Vietnam war, resigned from the Kaiser staff, declaring "My resignation was my own doing and not the action of the medical group." His wife **Barbara** added, "Too many GP's die young. I'm glad Will decided to resign." His plans are indefinite, but he hopes to do some writing and some reading and devote more time to his hobby of photography.

Elected, Honored, Appointed

On the national front, our **Harry Shirkey** was elected to the Committee of Revision of the U.S. Pharmacopeia while U of H Med School dean, **Windsor Cutting**, retired from their Board of Directors. . . .

On the local front, **L. Clagett Beck** came up through the ranks to become Hawaii Governor for the Society of Colonial Wars. **Robert Kemble** was elected to the new board of directors for HOH (Honda of Hawaii) Corp. **F. J. Pinkerton**, who came to Hawaii as a lieutenant in the Army Medical Corps in WWI and stayed on in private practice, was recently cited by Gen. Hal Jennings, Surgeon General of the Army, for his 32 years of active medical consultation to the U.S. armed forces and was named a consultant emeritus. . . . **R. C. Dusendsehon** was named medical director for Hawaiian Telephone Co. (the first appointment of its kind for a local firm).

On the political front, **William Dugg** was reappointed by the Governor to the Board of Medical Examiners and **Roy Kuboyama** and **Angie Connor** were appointed to the newly established School Health Services Advisory

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HAWAII PHARMACISTS' BULLETIN

Official Publication of the Hawaii Pharmaceutical Association

OFFICERS

President: BETTY BELL, *Vice President:* NOEL EVANS, *Secretary:* NOLAN HASEGAWA, *Treasurer:* RICHARD HORI, *Board of Directors:* C. CACHERO, H. T. CHEE, B. CHOCK, E. ELKE, F. FRICK, R. NAITO, W. OGOMORI, J. TARASAWA, A. YEE, C. YEE.

President's Corner

An Overview of the National Pharmacy Insurance Council

As your delegate to this Council I think it is necessary to report the progress and share with you some of the basic reasons I feel that this Council is so very important to your professional futures.

With the introduction of President Nixon's "Family Health Insurance Program" this past June into the political hopper, it is only a matter of time before yesterday's theory of a national compulsory health insurance becomes a reality. The House recently passed the Administration's plan to replace our outmoded welfare system with an income maintenance program . . . but the Senate Finance Committee balked. Result: compromise. To allay the fears of the Senate that the poor people might not have the incentive to work their way off the federal dole if they lost food stamps and Medicaid, the Administration agreed to add the "Family Health Insurance Program" to the Income Plan. Medicaid is on the way out . . . prepaid health maintenance program covering both Medicare and Medicaid beneficiaries are on the way in.

Is Pharmacy Ready to Participate Intelligently In Third-Party Prepaid Programs?

How many of us really know how much it costs *us* to fill a prescription? The "National Pharmacy Insurance Council" has been organized to represent us by fulfilling the objectives stated below:

1. To establish effective liaison for the profession of pharmacy with all persons, sponsors, associations, companies, government agencies or other parties involved in pharmaceutical services or interested in prepaid pharmaceutical programs.
2. To provide and exchange information on pharmaceutical services and prepaid pharmaceutical programs for dissemination to the profession, government agencies and others concerned with third-party payment.
3. To develop guidelines for prepaid pharmaceutical programs which will assure high quality pharmaceutical services to the public; and uniform, efficient and economical claims processing mechanisms which will serve as incentives for pharmacist participation.
4. To conduct socioeconomic research on all aspects of pharmaceutical services which may be involved in prepaid pharmaceutical programs.
5. To conduct or engage in all lawful activities in furtherance of the foregoing objectives or incidental thereto.

The Council affairs are supervised by a Board of Governors composed of seven members elected by the Delegates plus one appointee from the American Pharmaceutical Association, National Association of Chain Drug Stores, Inc., National Association of Retail Druggists. . . . The American Society of Hospital Pharmacists has

petitioned for an appointee to the Board of Governors . . . action will be forthcoming soon. Delegates to the Council shall be appointed by the State pharmaceutical associations and the national organizations represented in the American Pharmaceutical Association, House of Delegates which agree to participate in the Council.

The actual workload of the Council is accomplished through three basic committees, whose titles and objectives are listed below:

1. Administrative Processes Committee

Objective: The design of systems, mechanisms and procedures involved in receiving and processing claims for pharmaceuticals and pharmaceutical services with third-party agencies.

2. Reimbursement Methods Committee

Objective: The development of an equitable and feasible system of reimbursing pharmacists under third-party payment programs.

3. Service Benefit Committee

Objective: To delineate pharmaceutical services as they contribute to optimal therapeutic use of drugs to patients including attention to both pharmaceuticals and pharmaceutical services.

The Administrative Processes Committee has presented a Universal Claim Form (U.C.F.) for your review, see following page.

It's later than we think. . . . Pharmacists in Hawaii must stand-up and be counted. Forward *your* ideas on prepaid plans to my attention; I'll pass them on to the Council. ARE YOU IN FAVOR OF fee for service, co-payment, or a deductible type of reimbursement plan? Food for thought! May I hear from you?

The National Association of Chain Drug Stores has submitted a request to the Council that the Council Prospectus be amended to allow NACDS participation in the NPIC with representation on the Board of Governors. Your H.Ph.A. Board of Directors voted in favor of granting the NACDS this privilege at the August 14, 1970 meeting.

Board of Directors Meeting

On August 14, 1970 at 7:50 P.M., a meeting of the Board of the Hawaii Pharmaceutical Association was held at the Queen's Hospital. Those present were: B. Bell, N. Evans, R. Hori, C. Cachero, E. Ehlke, C. Yee, J. McElhiney, E. Sandison, T. Torigoe, H. Urashima, Captain Crawford, and H. T. Chee.

The minutes of the last Board meeting were approved as read except for one correction. The dates for the convention should have read April 2-5, instead of August 2-5.

CORRESPONDENCE:

1. President Ball has been selected to serve on the President's Advisory Committee of NARD.

2. Earl Sandison contacted Dr. Harry Arnold Jr., Editor of the HAWAII MEDICAL JOURNAL. The JOURNAL

conference, Woodcock stated: "The insecurity created by the health crisis in America gnaws at the American family and at the deepest roots of our society. Our health security program represents a serious major effort to face this challenge. We believe it will put an end to today's health care crisis; a crisis due to the lack of a nation-wide system of providing and financing comprehensive, high-quality care."

The costs of Medicaid have been much higher than anyone—proponents or opponents—had estimated. The annual Federal cost of Medicaid has gone up from an estimate of \$1.6 billion in 1967 to \$5.5 billion by January 1, 1970. It is estimated that the Reuther Plan will exceed \$40 billion in yearly costs. The question of where the money is coming from has revealed the following figures: 40% from Federal tax revenues, 35% from a 2.8% tax on employer payrolls AND 25% from a 1.8% tax on individual income.

Insofar as drugs are concerned, the committee reports:

"Medicines provided to in-patients and persons enrolled in comprehensive group practice plans will be covered from a broad list of drugs and medicines established by a newly created health security board and will be reviewed annually. For others, drug coverage will apply only for chronic disease and conditions requiring long or especially costly drug therapy. The purpose of the board's lists and annual review of drugs will be to assure the safety, effectiveness and reasonable cost of the prescribed drug."

... If we examine closely the 2.8% tax on employer payrolls, we come up with the startling fact that in a two-man pharmacy, the employer is going to have to come up with almost \$1,000 a year as his contribution to the program. In light of this fact, it would seem that the economic future of our profession dictates that if we are going to support it to the tune of 35% of the total costs, we are going to have to DEMAND representation on the five-member board or any other similar board set up to review "reasonable costs." We agree with our colleague Willard Simmons of the NARD that the time has come to Pharmacy practitioners to demand the right to negotiate collectively for the fees received under third-party programs and without fear of prosecution under THE ANTITRUST LAWS.

Mr. Simmons addressed himself to this issue in the July 13 issue of *American Druggist* with these words: "The time may have arrived when we should demand the legal right without jeopardy from the antitrust laws, to bargain collectively for just remuneration for professional services. Retail pharmacy owners are as deserving of the right to collective action, through their national organization . . . NARD . . . as are members of labor unions. Each wants what he considers to be fair compensation for his services."

(*The VOICE of the Pharmacist*, August 11, 1970, Vol. XIII, No. 40.)

DRUGS FOR GONORRHEA TESTED FOR EFFICACY

Because of the relapse rate in patients after being given certain antibiotics for gonorrhea, Dr. I. Phillips, head of a research team at St. Thomas' Hospital, London, decided to find out which agents work best against the disease.

The research team decided to test, in-vitro, 12 agents that have been used to treat gonorrhea. Their findings were that the drugs worked in the following order of effectiveness: penicillin, erythromycin, rifampicin, tetracycline, streptomycin, clindamycin, linomycin, sulphamethoxazole, and trimethoprim.

SYNERGISTIC: The researchers also performed in-vitro studies on a combination of sulphamethoxazole and trimethoprim in regard to gonorrhea and found them to have a large synergistic effect when combined.

The researchers say that "the ideal antigenococcal agent should have the following properties: effectiveness as a 'one-shot' treatment, rapidly bactericidal but not treponemacidal, cheap, easy to administer, and non-toxic. For the moment a single large dose of penicillin given with procaine and probenecid seems to fulfill these criteria most closely." (*American Druggist* 6/15/70.)

RESTRICTIONS PUT ON METHADONE IN NARCOTIC ADDICTION TREATMENT

... Because both the Food and Drug Administration and the Justice Department's Bureau of Narcotics and Dangerous Drugs are convinced that Methadone is often abused when given to addicts, that there is diversion and careless handling of the drug in many rehabilitation programs, and that stricter controls and reporting and record-keeping will develop needed scientific information on the extent to which it helps addicts, FDA considers Methadone to be an *investigational* drug subject to special regulations when used in maintenance therapy for narcotic addiction. On this basis, the Food and Drug Administration has approved regulations which will make the drug available to community clinics for controlled, scientific programs designed to rehabilitate heroin addicts. The action was taken because the Methadone which is supplied to patients for home use has a ready value in the illicit market and controls must be adequate to insure against such diversions. *It will however, remain an ordinary prescription drug if a physician desires other type patients to receive it.* (*The VOICE of the Pharmacist Inc.*)

CHLORAMPHENICOL— LATIN AMERICAN WARNING

Reference was recently made to the availability and widespread use of chloramphenicol in South America, where drug-induced aplastic anemia is "dreadfully common" (Clin-Alert No. 125, 1970). The Food and Drug Administration, through American embassies, has now issued a warning to Latin American physicians that the labeling of 'Chloromycetin' (chloramphenicol—PD&Co.) distributed in their countries fails to indicate all dangers and over-promotes the drug's effectiveness in a number of diseases. The diseases include measles, pertussis, ulcerative colitis, varicella and infectious hepatitis, none of which are permitted to be mentioned in the U.S. labeling. (The FDA has no control over the labeling of exported drugs.) The Spanish language labeling fails to include the warning that Chloromycetin may cause *fatal blood disorders* and lacks a precautionary statement regarding the parenteral use of Chloromycetin Sodium Succinate.—Drug Trade News, June 15, 1970. (Clin-Alert, July 25, 1970.)

Personnel Placement Service

This office receives numerous inquiries from qualified pharmacists wishing to practice in Hawaii . . . The names and addresses of applicants are available to any of our membership wishing additional staff by calling or contacting the Association Office, P. O. Box 1198, Honolulu, Hawaii 96807 or Phone: 247-4451 or 247-5965.

News of Our Colleagues

Miss Vivian Kanemaru, pharmacist in charge of drug distribution and control at G. N. Wilcox Memorial Hospital, will be touring Japan and Hong Kong the first three weeks of September, 1970.

Mr. Robert VonRohr, a graduate of the University of Minnesota School of Pharmacy from Wonoa, Minnesota, has joined Island Pharmacy in Lihue, Kauai as its pharmacist-manager. Welcome to Hawaii, Bob.

Calendar 1970

October 9, 1970—Board of Directors Meeting, Queen's Hospital

November 1970—Quarterly Meeting

November 1970—National Pharmacy Insurance Council Meeting, Washington, D.C.

November 13, 1970—Board of Directors Meeting, Queen's Hospital

December 6-10, 1970—ASHP midyear clinical meeting, Anaheim, California. ■

Hawaii

The July 15 meeting was opened at 7:00 P.M. by Dr. Bracher, president. Members present were Drs. Smith, Bracher, Oto, Carvalho, Wiperman, Loo, Helms, Mitchel, Best, Okumoto, and Ballerini.

Dr. Bracher introduced the guest speaker, Dr. Rex Kenyon, a practicing pathologist from Oklahoma City, and an AMA official. He spoke on matters of pending Federal legislation and its anticipated effect on the patient, private physician, and medical health in the U.S. He also described the events occurring at a recent AMA convention in Chicago when the platform was seized by radical groups of individuals.

An informal discussion followed Dr. Kenyon's talk.

Honolulu

Approximately 110 members were present at the June 2 meeting.

The minutes of the April 7, 1970 meeting were approved as read by Dr. Moore.

The following new members were introduced to the membership of the Society: Drs. Clare Sprague, Charles L. Langeberg, David J. G. Fergusson, Servio S. Lim, and Bert K. S. Lum.

The Utilization Review Committee of the Society clarified to the membership the need for proper and adequate record keeping and the cooperation of the attending physicians to avoid unnecessary denials of medicare benefits of patients in extended care facilities. Instructional material was circulated to the membership relative to Medicare's definition of what is considered covered, non-covered, and skilled service in placing patients in the ECFs.

Senator Hiram Fong, Senior Senator from Hawaii, was the speaker for the evening's program. Senator Fong's subject for discussion was "Current Issues—Specifically the United States Involvement in Vietnam and Cambodia." A question and answer session followed Senator Fong's presentation.

Maui

Eighteen members were present at the July 21 meeting. Guests included Drs. John Behnke and Lloyd Guthrie, Messrs. Albert Yuen, Ralph Kisling, Marvin Hall, and Albert Izon.

The continuation of the Rubella vaccine at the various doctors' offices during the months of June and July was reported as only fair. As of the 1,000 doses distributed, only 242 doses were given thus far, as shown by an informal poll.

Act 60 was reported to have been passed at the last legislative session relating to the professional society peer review committee regarding liability limitations and restrictions.

It was announced the public hearing on fluoridation is to be held at the Board of Water Supply on July 27, 1970 at 10:00 A.M. Drs. Manuel Kau and Harry Arnold of Honolulu will be present and Dr. Fu will represent the Maui County Medical Society.

The application for membership was approved for Dr. John Behnke.

The infectious hepatitis report was then given by Dr. Lloyd Guthrie from the Board of Health's Epidemiology section. He spoke briefly on the Shigella outbreak in June and then delved into the problem of the infectious hepatitis problem on Maui at the present time. It was noted that the index case was implicated to have been traced probably to the Makena Beach area and so far, as of this month, there were eleven cases reported with four suspects noted. It was his opinion that the hepatitis outbreak is on an upswing at the present time.

Mr. Albert Yuen and his associates reviewed the current HMSA program, its future proposals and a prepaid group practice proposal. A question and answer period then followed and the meeting adjourned at 10:40 P.M.

A special meeting was held on August 13, 1970 at Heinz's Restaurant and presided by Dr. Milton Howell in the absence of Dr. Sakae Uehara.

Eighteen members were present. Guests included: Dr. George Mills, Dr. John Briley, Mr. Tom Thorson and Mr. William Bowman.

Dr. Iaconetti briefed the Medical Society of the present prepayment plans and the proposed prepayment plan of HMSA.

Dr. George Mills reported that the Honolulu County Medical Society initiated a study in 1959 for the inception of the Honolulu Foundation prepaid type of insurance. The advantages included the stable Relative Value Schedule to continue for a period of 24 months. He also stressed the free choice of physician offered to the medical public because of the different types of prepayment plans that are being initiated in our present locale. Mr. Bowman considered a conversion factor of 6 to 6.5 (Relative Value Schedule) for the addition of a drug program to be included in the Plan. Mr. Bowman elaborated on the Cal-Western type of insurance program of underwriting of insurance. He reported that the Plan exceeded minimum standards and a free choice of physicians.

Several Maui Labor Union leaders were interested in the present outline of the proposed plans.

Competitiveness for the family budget was considered comparable.

At the conclusion of the meeting, it was reported that a chosen Ad Hoc Committee for prepayment of medical plan studies were to include Drs. Howell, Iaconetti, Izumi, Withers and two appointed physicians along with Mr. Tom Thorson.

The August 20 meeting was held in the hospital dining room following the Thursday hospital staff conference. In the absence of Dr. Uehara, Dr. Howell called the meeting to order.

Twenty-three members were present.

Dr. Iaconetti presented the advantages of prepaid medical plan proposal for approval of the members of the Society. This proposed plan had met the approval and interest from insurance carriers, proposed interested families, labor and management, and the local doctors.

It was stressed that the Medical Society should show an active support of the plan by at least 90% of the local medical doctors.

Dr. Underwood made a motion to accept the concept of the principle of the prepaid full coverage foundation type of full medical care to be studied in greater depth. The motion was unanimously carried. ■

of the Publications Committee that there be a 50 per cent increase in advertising rates.

It was voted that an editorial assistant be hired for all HMA publications with a salary range between \$600 and \$750.

ACTION:

It was voted to approve the request for \$500 for the HMA Editor's contingency fund.

Commission on Internal Affairs: A progress report was given on the 115th Annual Meeting. It was reported that the Annual Meeting dates are April 27-May 1, 1971, and the meeting site is at the Ilikai Hotel.

Commission on Public & Interprofessional Relations: Dr. DeJesus reported that the Japanese Speakers' Bureau has been very active and they have their programs scheduled for the entire year. This committee is requesting \$500 for visual aids for their programs.

ACTION:

It was voted to appropriate funds not to exceed \$500.

The draft of a memorandum to organizations interested in furthering health careers was discussed. There was concern about the third paragraph which states "organization of the Health Careers Council might follow the pattern of the Continuing Health Education Council of Hawaii; i.e., a large and comprehensive membership meeting twice a year, a representative Executive Committee of perhaps eleven to organize and direct specific programs and, hopefully in the future, a small professional staff to carry on day by day business." There was considerable discussion about formation of Councils and the role of HMA. Several members of the Council stated that the HMA spearheads a program and then loses its identity once the program has been implemented. It was suggested that perhaps some kind of policy statement be developed in regard to formation of Councils; e.g., Drug Abuse Council, Health Careers Council, etc.

ACTION:

It was voted to delete paragraph No. 3 from the draft of the Health Careers memorandum.

Commission on Medical Services: Mr. Thorson was asked to speak on this report. He gave some background information on meetings and discussions between DSS and HMA. At the last Council meeting, it was voted that the Commission on Medical Services explore with the DSS the delivery of medical services to their clients at the usual and customary fee under a foundation plan insured with an insurance carrier. Mr. Thorson pointed out that some attempts have been made with DSS to carry out discussions with very little response and no results. In the interim there have been a number of contacts made; e.g., the HEW Auditors were here and the Ombudsman has contacted HMA relative to whether or not DSS has entered into renegotiations with HMA. He further noted that the DSS does not want to enter into discussions with the Foundation. It was Dr. Moore's recommendation that there be no further negotiations with DSS because of the lack of interest on their part in effecting any changes or modification of the program. It was also noted that DSS has written Rep. Patsy Mink and Rep. Mink sent a copy of that letter to the HMA.

ACTION:

It was voted to write a letter to Dr. Roger O. Egeberg, Assistant Secretary of Health & Scientific Affairs of HEW, inviting him to meet with the officers and representatives of HMA to discuss DSS program.

It was voted that copies of the letter be sent to the AMA, Governor Burns, Hawaii Congressmen, Mr. Among, Ombudsman Doi, Speaker of the House and President of the Senate, and Dr. Richardson of HEW.

The Fee Survey Committee has completed its study of the RVS, and bids have now been received from printing companies to publish the RVS. The bids run from a low of \$3,600 to \$9,300. It was reported that the lowest bid is based on whether or not it can photograph some of the pages in the California RVS. A letter has been written to CMA asking for permission to do this. To date there has been no answer. It was further reported that Dr. Warshauer is very anxious to get this RVS out. The question of finances is of utmost importance, and Council is requested to act on this matter. The Fee Survey Committee has been budgeted \$3,000 to print the RVS and from the lowest bid received, it will cost somewhere in the neighborhood of \$3,600. (This is contingent upon CMA's response.)

ACTION:

It was voted to approve the lowest bid submitted whereby the printing company can utilize photographing certain pages from the California Medical Association's RVS should permission be granted by CMA.

It was voted that if permission cannot be obtained from CMA, that the 2d lowest bid be utilized.

The Council granted permission to have the company with the lowest bid resubmit another bid based on resetting the whole book.

ACTION:

It was voted to charge \$2.00 per copy to regular HMA members and \$10 to non-members.

UNFINISHED BUSINESS

HMA & HCMS Staff Merger: Mr. Thorson reported that progress is being made. He said that he has drawn up an organization chart which is being changed from time to time, and that it is not really ready to present to the Council. He pointed out that the staff organization is dependent on a number of changes; first of all, the Council and the Board of Governors have now both approved the common fund operation which is one matter that can start to operate; secondly, there is still a problem in the physical juxtaposition of staff. The House of Delegates mandated that this be done, and the recommendation was brought before the Board of Governors of the HCMS and the HMA officers to consider seeking new headquarters for HMA, HCMS, and the BME. Dr. Omura appointed Drs. Dang, William Moore, and Oda to the HCMS committee to look into this matter. Mr. Thorson suggested that perhaps Dr. Lowrey should appoint an ad hoc committee to work with the County's ad hoc committee. Mr. Thorson also pointed out that one organization should be designated the "employer" in this merger for tax purposes, and it was his personal opinion that HMA be the designee. Mr. Thorson pointed out that there are many factors that have to be ironed out slowly, and that the Council will be given a progress report from time to time.

Malpractice Insurance: Dr. Lowrey stated that he would appoint an Ad Hoc Committee on Malpractice Insurance and asked Dr. Herbert Chinn to serve as its Chairman.

NEW BUSINESS

Method of Compensation for Mr. V. Thomas Rice: It was reported that the HCMS employs Mr. Rice on a retainer basis, and that the HMA employs Mr. Rice on an hourly basis.

ACTION:

It was voted that the HMA add \$1,200 to the

HCMS's \$1,800 to make an accumulative retainer fee of \$3,000 to be paid Mr. Rice.

Report of Woman's Auxiliary to HMA: Mrs. Lawson reported that very little has transpired since the House of Delegates meeting. She reported on some of the activities of the Woman's Auxiliary's national meeting held in Chicago in June. One of the highlights was a painting presented to Hawaii for the highest increase in ERF monies. Mrs. Lawson emphasized that the Woman's Auxiliary to the HMA would like to help implement projects which HMA finds worthwhile and important. She pointed out that their goal is to assist with HMA projects.

Meeting with HMSA: Dr. Lowrey reported that he and Dr. Omura met with Mr. Albert Yuen of HMSA. It was reported that over the past year, HMSA has been having consultation with the Hawaii Association of Medical Clinics and with various individual groups in which they are considering being intermediaries, selling plans for closed groups. Dr. Lowrey stated that HMSA says that this is the way government is going, and this is what they mean by health maintenance organizations (paragraph C under Social Security). Mr. Yuen told Dr. Lowrey and Dr. Omura that what they propose will not be competitive with Kaiser. In essence, HMSA is ready to sell closed panel medicine or prepaid contractual medicine. It was pointed out that HMSA wants to represent various groups as a fiscal intermediary. Groups will be coming into a competitive bidding position for the same group of individuals through the same fiscal intermediary, who is going to be operating on an administrative fee which is an override off the top, and they don't care who gets it. The fight will be between two or more groups and based almost entirely on price. It was further pointed out that this type of situation would put HMSA in a very strong position.

Dr. Iaconetti pointed out that Honolulu does not have the problem that the neighbor islands are faced with. For example, he said that Kaiser is actively negotiating with large segments of Maui's population for coverage. They have gone to Pineapple, County, and State government employees, and in November they will go to the hotel employees.

Dr. Mills stated that if all doctors supported the Foundation, perhaps this might not have happened. Dr. Iaconetti stated that Maui has tried to get Foundation coverage, but that they have not been assured, and he asked what Maui doctors could do to give the Foundation support.

Dr. Mills stated that there must be several reasons for Maui not being able to support the Foundation. He pointed out that the Foundation is reimbursing at a conversion factor of 6.0 which is predictable, and if the Foundation is not selling on Maui it is perhaps (1) the doctors won't sign up with the Foundation or (2) the conversion factor of 6.0 is too high. However, when surveys are done, the doctors say their conversion factor is 6.0 or greater, so that must mean everyone must be getting 6.5 or greater. Dr. Iaconetti stated that there is a third reason and that is nobody is selling the Foundation Plan on Maui. Dr. Iaconetti stated that one thing that HMSA is willing to provide the physician on Maui is the actuarial figures, the know how of setting this up, and the ability to say "yes I can sell it at this amount," and no one else can provide this kind of information.

The physicians on Maui realize the need for a predictable medical plan to compete with Kaiser. It was suggested that someone from the Foundation go to Maui to meet with key people to try to sell the Plan.

Election of HAMPAC Board Members: The following were elected to serve on the Board:

1st District.....	William David Jones
2d District.....	William E. Iaconetti
3rd District.....	Don E. Poulson
4th District.....	Rodman Miller
5th District.....	E. Robert Ballard
	L. Q. Pang

6th District.....	P. Howard Liljestrand
7th District.....	B. A. Richardson
	George Goto
8th District.....	Yonemichi Miyashiro
Woman's Auxiliary.....	Mrs. George H. Mills
	Mrs. Jerome L. Tucker

Election of the Bureau of Planning & Research Committee: The following were elected to serve for a three-year term: Richard T. Mamiya, J. I. F. Reppun, Mark B. Sowers, and Lawrence H. Gordon. The following will fill unexpired terms for one year: George Henry and Claude V. Caver.

Election of the Finance Committee: The following were elected to serve for a three-year term: Robert Chung and Richard D. Moore.

Report of the AMA Delegate: Dr. Mills reported briefly of some of the activities of the AMA Convention held in June in Chicago. Walter Bornemier, M.D., was elected President and Wesley Hall, M.D., was elected President-Elect. Of significance at this meeting, a Long Range Planning Committee was developed. One of the hot issues brought before the floor was about abortions. The incoming President, Dr. Bornemier spoke on changes in our approach in medical education. The issue at the convention was the increase in dues to \$40. The primary purpose of increasing the dues is due to inflation and the cost of running the Association. There was considerable discussion about Peer Review, and everyone was urged to go back to their Association to set up Peer Review Committees. Hawaii's bid for the 1972 AMA Clinical Convention was lost. Dr. Mills pointed out that it seemed very promising that Hawaii would be selected until Cincinnati came up with their bid. However, Hawaii still has its bid in for the 1975 Session. Dr. Mills asked if Dr. Lowrey would write a letter to the Board of Trustees expressing HMA's disappointment but looks forward to favorable consideration for 1975's meeting. Mr. Thorson was asked to resubmit the Resolution to the Board of Trustees.

Dr. Mills reported that there was considerable discussion about the development of policies so that medical assistants can be incorporated into the practice of medicine. The staff of the AMA was asked to look into the legal aspects in providing a premise so that these individuals can practice medicine without the hazards they are confronted with at the present time.

Miscellaneous: Dr. Lowrey scheduled Council meetings as follows:

Friday, September 18, 1970
Friday, December 11, 1970
Friday, February 12, 1971
Friday, April 9, 1971

At a joint Finance Committee meeting of the HCMS and HMA, it recommended to the Board of Governors and Council that a new addressograph machine be purchased.

ACTION:

It was voted to approve the purchase of an addressing machine.

EXECUTIVE SESSION

The Council went into executive session.

ACTION:

It was voted that Mr. H. Tom Thorson be given a \$100 a month bonus, starting August 1.

It was voted that Mr. Thorson's salary and bonus will be paid by the HMA and HCMS on a 50-50 basis.

ADJOURNMENT

The meeting adjourned at 10:50 P.M.

R. VARIAN SLOAN, M.D.
Secretary

Committee. The committee will undertake a one-year pilot project to determine how effective public health nurses and health aides can be in providing health services for public school children.

Conference Humor

A 47-year-old Japanese man with severe left retro-orbital headaches was discovered to have a leaking aneurysm of the left cerebral artery. A Selverstone clamp was applied to the left common carotid, but despite this aggressive approach, the patient expired several days later. Neurosurgeon **Max Urata** discussed the results of co-operative studies on the three modes of treatment: viz., hypotension with bed rest, hypothermia, and surgery, and explained that no conclusive mode of treatment has been established. The following dialogue ensued with hospital pathologist, **Grant Stemmerman**. . . . Max: "Hypotension and bed rest show no significant improvement in mortality, but if you want to be nihilistic, you could leave it alone." Stemmy: "You are not being nihilistic by leaving it alone." . . . Max: "But you're being nihilistic from a surgeon's point of view."

Letters to the Editor (By Nonmembers)

A "T. Schnyder, M.D.," writes a tear jerker: "A calf, the property of the government is sick. [Ed.: so is the author.] It is wounded and abandoned by the herd; flies settle on the left ear. It is too weak to escape wild dogs—it will die a cruel death because nobody takes care of it. This calf on the Makanalua peninsula on Molokai today is dying as did the lepers in olden times. The State administration, aware of this situation, offers no help. This dying calf is seen by the patients of the Kalaupapa Settlement and to them it is a symbol and reflects the State's inertia. . . ." [Ed.: and also the author's inertia. . . . A trained M.D. certainly should be able to minister to a sick calf.]

One "Elliot S. Cohen, M.D.," apparently manned the first aid tent at the Crater Festival recently and noticed that "dropouts, hippies, and misguided youth found something they were interested in and really put out. . . . There is a lesson here for the Establishment. . . . It is that our so-called 'alienated' young people are capable of tremendous effort and organization if there is something that interests and involves them. . . . An individual's life style, his dress, and the way he wears his hair is not necessarily a good indication or absolute criterion of his maturity and ability." (Now, we suppose, it is up to us, the Establishment, to find that "something that interests and involves them.")

A "Larry L. Morgenstern, M.D.," writes: "As a physician and parent, my personal concept of obscenity is best stated by quoting Herbert Marcuse: 'Obscene is not the picture of a naked woman who exposes her pubic hair, but that of a fully clad general who exposes his medals awarded in a war of aggression; obscene is not ritual of the Hippies, but the declaration of a high dignitary of the Church that war is necessary for peace.'" (Salom. . . . We get the message.)

Letters to the Editor (By Members)

Grape boycotter **Fred Dodge** informs us that the four-year-old strike in California was settled only with two small growers who produce less than 1% of the grapes. Fred pleads passionately, "So to those who are concerned with the plight of the immigrant farm worker, to those who have helped so beautifully—please continue your support at this crucial time. The boycott is not over. So

please don't buy or eat California table grapes. . . ."

When "a piece of rather unsavory journalism" printed in the *Star-Bulletin* under "Molokai Meanderings" rumored that R. D. Zandee van Rillan may be reinstated with privileges at the Molokai General Hospital, Molokai's **Paul Stevens** got his dander up. Paul rebuked the reporter for personal editorializing by intimating that "not only the hospital board of trustees, but ANYONE would be intimidated into failing to carry out their responsibilities by the threat of a \$3,000,000 suit. . . ." Paul writes: "If coercion by the threat of law suits dictated the actions of all people in positions of responsibility in this country, it would be easy to see how we would soon be rapidly sliding down the path of anarchy." (Hear! hear!)

Doris Jasinski writes to Senator Fong: "My husband and I feel the President made the right move (re the Cambodian affair), considering the circumstances, and we want to express our support of his policy in this matter. . . . I am glad to read by *The Advertiser* that you likewise support him. . . . It is too bad so many other members of Congress—though they are much older than I—have such short memories regarding 1939 and appeasement; or are so short-sighted that they believe the U.S. could back down in Indochina and come off unscathed. Who is to say that our presence in Asia has not prevented a wider war—World War III? I believe that our military action has deterred a general holocaust thus far."

Our favorite letter writer **Fred Reppun** reports: "There has been a widespread furor in the press during the past year over alleged abuses of Medicare by physicians, particularly the headlines about huge payments made to not a few doctors. The implication has been that doctors in general are cheating on Medicare and Medicaid and thereby have contributed to the huge deficit in the Social Security Administration, and have caused the rise in costs of medical care." Fred points out that "HEW has recently reported that approximately half the cases of alleged fraud investigated by the SSA resulted from clerical errors, misunderstandings and honest mistakes by physicians and health service." "Out of 2,500 cases investigated in the 3¼ year history of Medicare in the nation, HEW reports only two convictions for fraud. . . . Is it for this, that some 200,000 physicians in the U.S. have had their reputations collectively tarnished by headlines? . . . What recourse do we have when "Big Brother" government authoritatively puts out misinformation?" (Good ole Fred—geevum!)

Fred also lambasted the legislators for the "sorry show the Legislature put on in trying to get at Mayor Fasi. . . . What the people have determined by the ballot may not be set aside by a legislative body. . . . The more shame to those of our senators who tried, even if only as a joke or as a threat. It is hardly likely that an old political campaigner like Frank Fasi will be frightened by such puerile tactics."

When Larry Jones criticized the Board of Education for neglecting the Kalihi-Palama district, **Dick Ando**, chairman of the board, composed a long letter of dissent defending his Kalihi-Palama Educational Task Force, starting as follows: "The judgmental process of your Sunday Columnist, The Rev. Larry Jones, is hard to accept as intellectually honest. That he speaks for the disadvantaged or for the grass roots is a self-assigned privilege he apparently reserves for himself. . . . That he presumes the Board of Education is not as current as he is on the issues of education for the children of the disadvantaged families is a 'holier than thou' attitude." (Touché!)

Since we are on the subject of Larry Jones, we note another letter from **Gerald Hiatt**, M.D. (U of H, Class of 1964), who writes: "Sir: I have a solution to the problem at the University. After noting the antics of the so-called Reverend Larry Jones, I think the true nature of the Religion Department of the University has been laid bare—a division that does not deserve the title of Department, a haven for professors and students, who, rather

than study true religion, are scurrying around espousing their own personal philosophies and a group that certainly has no business granting degrees. Whatever happened to that grand institution of compromise? Why not end credit for ROTC and for subjects taught in the Religion Department as well?" (Ed.: Shape up or ship out, ch?)

Bob Bright from Naalchu, Hawaii, who espouses "bright" thoughts, says, "Bishop Scanlan's remarks on the repeal of abortion laws reveal an arrogance far beyond a typical Catholic 'holier than thou' attitude. . . . Catholics have been ordered by the Pope to have nothing to do with abortion or contraception. That is that. . . . The world must have population controls. If the Catholic Church refuses to accept this established fact and is only interested in the selfish propagation of Catholic people, power and politics, we shall have to seek progress without them. It is about time that the Catholic Church emerged from the Dark Ages." (Fortunately, not all Catholics agree with Bishop Scanlan.)

When the first conviction for atrocities against the civilian population of Vietnam was announced, **John C. Roberts** ruminated: "Some troubled thoughts come to mind. . . . In a government of, by, and for its people, a chain of command runs from the citizen and taxpayer through Congress and the President, to the Pentagon and on down the line, the net result of which is to order young men, be they draftees or volunteers, into war, and to place some of them in an impossible position. . . . Let us not even pretend, when a 'killer team' goes in, that there are any moral niceties remaining at such a time; these are disposed of by Voltaire's insight that murder is an awful thing and we do well to punish it severely, except when [it is] done in large numbers and to the sound of trumpets. . . . This is not an argument for or against the draft, for or against this war . . . nor an attempt to downgrade the hideousness of the events which Pvt. Schwarz found himself enmeshed. It is simply a plea for rudimentary honesty in our disposition of this matter, and a hope that, along with whatever feeble way may be found to make reparations after such events, a little less of the fault may be placed on the Pvt. Schwarzes of this world, and considerably more of the responsibility be placed where it belongs, on up the chain of command. . . . The greatest foolishness is that of those who see war as justified by high-sounding purposes, and feel it can be carried out cleanly and neatly. The greatest culpability is of those who know its nature and forget their place in that chain of command we mentioned. . . ."

Members Speak Up

With the recent outbreak of dysentery and hepatitis on Maui, **John Morris**, chief of staff at Maui Memorial, urged citizens to petition the Governor to instruct the Attorney General to draft new laws if necessary. "We know what the problem is, where it is, and how to treat it. . . . Why can nothing be done? . . . Disease will not wait for courts."

One-time pharmacist, and now professor of pediatrics and pharmacology, **Harry Shirkey**, feels that syrup of ipecac, which induces vomiting within 20 minutes is "a must for any family with children or for any home frequented by youngsters." Harry points out that some half million to 1½ million youngsters are poisoned in the U.S. each year.

Our RMP director, **Masato Hasegawa**, blasted the highway planners for leaving hospital access out of their planning. He describes them "as very much remiss, whatever the reason, be it lack of knowledge, tunnel vision, or stupidity. . . . Obviously they are not using well qualified health care system planners. . . ."

Richard Youn traveled extensively in Europe as a member of the U.S. Olympic Committee and exulted: "Wherever I went, government officials respected the Olympic symbol. Invariably they gave me VIP treatment when they recognized the insignia on my lapel." While travel-

ing in Czechoslovakia, he wrote Ed Sherman: "Most of the babes here are big busted due to walking and climbing."

In a talk entitled "Sexual Freedom—Utopian or Satanic? Some Evidence from Palau," psychiatrist **George Schnack** concludes that complete sexual freedom—a dream that has tantalized Western man for all of recorded history—does not make for paradise as evidenced in Palau. The Palauan men are severely disturbed emotionally, with a pervading sense of suspiciousness, persecution, and impending violence, whereas the women seem better adjusted and chase men aggressively. George notes that this climate of forced heterosexuality accounts for a lack of homosexuality and that the men forced to have relations with the female are actually afraid of them. . . .

Notes and Comments

The HMA office receives some odd inquiries. Our executive secretary Tom Thorson showed us one recently from a physician in Los Angeles who probably wrote with smog tearing eyes: "Dear Sir: Do you have a list of present and anticipated openings for a physician who wishes to do general practice in a remote small community where there is a medical center/office/hospital/clinic on the order of the Hana Medical Center?" (We wish to reiterate that every remote isolated community does not have a medical center, even here in Hawaii.)

When **Dick Lam** had a hole-in-one on the 6th hole at MidPac earlier this year, **Ike Nadamoto** talked him into taking out a special hole-in-one insurance which costs \$10/year. Dick, confident that his first was no fluke, took out the insurance and sure enough on August 2nd had his second hole-in-one at the MidPac 11th hole using a 5 iron. Dick collected \$200 dollars in cash (which may have been dissipated purchasing the liquor consumed at the clubhouse) but he still has a free round trip to London for two. County Society prexy **Dick Omura**, one of his opponents, happily laments that the hole-in-one cost him over \$100 in bets. . . . (Well, we can't please everyone, you know.)

We learned from Bob Krauss' column that the Hawaiian kahunas' fee schedule resembles our own RVS somewhat and the conversion factor is about par. "A very great illness" costs \$50; "Less than that" is \$40; "A good deal less" is \$30; "A small sickness" \$20; and "Attending a friend" \$5. One basic difference, however, is that the kahunas' fee did not apply if the patient died or even if he was not cured. A physician interviewed by Bob would not make such a guarantee. "That's different. . . . We don't promise anybody a cure." (No positive thinking, eh?)

Our illustrious editor, **Harry Arnold, Jr.**, contributed the following graffito, which we thought was clever: "Portuguese walking through Ft. Knox: Silva treads among the gold."

Only three weeks after the abortion law went into effect, over 258 abortions had been performed in the various Honolulu hospitals. Three-fourths of the cases were single women; more than half were aged 21 through 29, and more than a third were under 21. (Fortunately, with other states following suit, we will not become the abortion mecca some had feared. . . .)

ENT man **Howard Crawford** is a one-time Wyoming cowboy who migrated to the Big Island in '24, and always wanted to be a gentleman farmer. He first tried passion fruit, but as he says, "The damn fungus wiped me out of that one." Next he tried papayas, but "two separate lava flows took care of my papaya orchards. I've been tinkering with Christmas trees ever since." "Crawf" feels that he could corner the U.S. market—"if." The Big "if" is—if he could get some smell in Norfolk Island pines; for they make perfect Christmas trees, being perfectly formed, last longer, and stay green without the needles falling. "Doc" has thought of taping a pine scent aerosol can to each tree with instructions. . . .

continued page 592

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Notes and News continued from 591

"Every day give it a shot." He says hopefully, "Someday, somebody will come up with an answer."

Hors De Combat

With patients suing us, doctors suing hospitals and fellow doctors, with our malpractice insurances being cancelled, and with overhead constantly rising, we often wonder why we ever got into this damn business. . . .

In February, a 19-year-old Kaimuki girl won \$8,000 in damages from Kaiser doctors for stomach pains suffered back in 1962. The parents were also awarded \$1,154.75 for expenses incurred in having to take her to another doctor for diagnosis and removal of an ovarian cyst. In May, a Circuit Court jury awarded \$18,051 to a Blanche Provence because a Medical Group orthopedist was supposedly negligent in an operation on her left foot in 1966. But then it warmed our hearts to see that another Circuit Court jury rejected the \$5.5 million damage suit against three Kaiser physicians by a Mr. and Mrs. Jack Tittle for reputed brain damages suffered by their son while being born. And we are also happy to report **Maurice Silver's** \$3 million lawsuit against Castle Memorial and several doctors was dismissed by Circuit Judge Tom Okino. Silver charged that the defendants conspired to prevent him from obtaining privileges and defamed him in doing so. He contends that he was discriminated against because he is a Jew and gave evidence to counter charges that he was dishonest, unethical, and incompetent. Silver still has a similar lawsuit for some \$17,000,000 pending against Queen's Medical Center, St. Francis and Kuakini hospitals, and a few score Honolulu physicians.

But then we are the constant targets for drug addicts. In December last year, six doctors' offices on the 2nd and 3rd floors at 181 S. Kukui Street were "burgled" (though only five, **Alex Lee, Walter Young, Sau Ki Wong, Riley Yuen, and Edmund Lum** were mentioned). All offices were entered through louvered passageway windows, as were **Herbert Wong's** and **Charley Ching's** at 1507 S. King Street several months ago. In fact poor Herbert was entered twice within a month while Charley only once. **Henry Yuen**, in Hilo, had drugs and syringes taken from his medical bag which was later found in a garbage can at Col. Sander's Kentucky Fried Chicken. (The stoned burglar probably stopped for a bite.) In late May, **Wah Tim Chock** had \$440 worth of drugs taken from his office at 1300 Pali Hwy. In June, when the medical offices in Waialae-Kahala were being "burgled," the culprits were apprehended and in their car was a basketful of drugs taken earlier that night from **Al Shimamura's** office at 2221 S. Beretania Street. Being located next to the police station is no help either. **Les Vasconcellos'** office, located at 1488 S. King (next to the police parking lot), had a 300-pound safe, containing \$80 in cash, papers, and an unknown amount of narcotics, rolled out and away. . . .

Entrepreneurs

There are apparently 97 fishponds on Oahu, but only four are still relatively undamaged, unaltered, and in a urban setting. One of them, the Kahaluu pond, is owned by **Ray Yap**, entrepreneur-extraordinary, who tried unsuccessfully four years ago to obtain a permit to dredge and fill it for a residential hotel-apartment-shopping-center and marina development. Recently the City and County started a flood control project at Kahaluu Stream nearby and the City's Road Division was dumping silt onto the pond banks. The Road Division officials maintained that the flood control work was costing \$18,000 to \$20,000 with the materials left on Ray Yap's property as compared to a cost of \$60,000 to \$70,000 if the silt had to be hauled away to Kapaa dump. But a Stell Newman,

continued page 596

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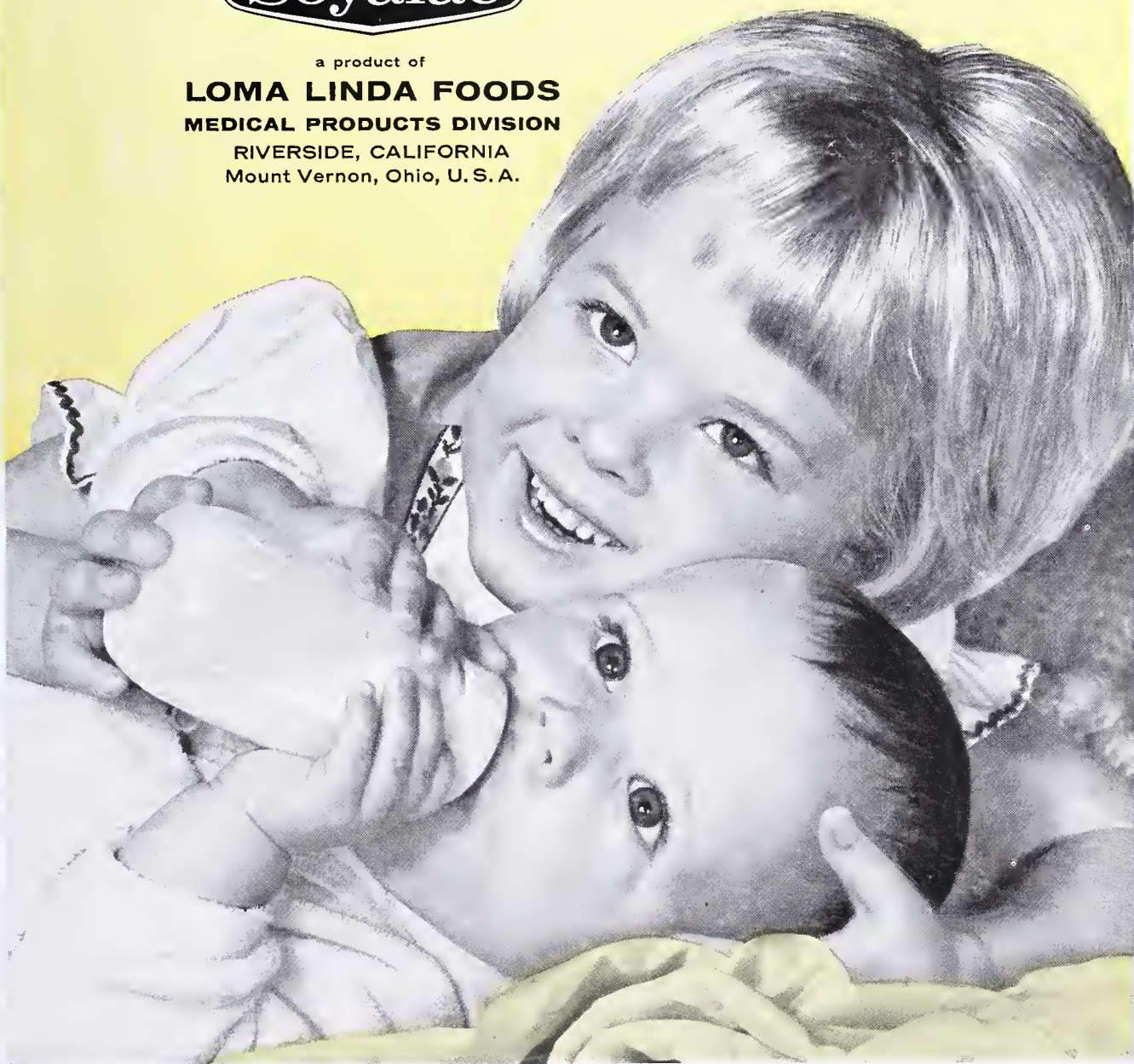
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Side Effects: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

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chairman of the Historic Sites Commission of the Conservation Council of Hawaii, put a stop to the operations on the technicality that the City had failed to obtain the necessary permits from State and Federal agencies. . . . (Foiled again. . . .)

Edwin Kam of Honolulu wishes to build a tourist resort near Makena. The beach on the seaward end of Puu-o-lai (Maui's cinder cone) is where police have been arresting hippies for nude sunbathing. Edwin owns 88 acres surrounding the Puu and the State owns the makai end and other beach land fronting Kam's property. If the State and County don't want to go along with his plans for developing the hill, Ed threatens, "Maybe we can make a sort of hippie resort of it."

B. Allen Richardson and his family received clear title to two parcels of land in the Punaluu area. Disputing the clear title was David Kaapu of Punaluu, who claimed a one-fourth interest. The title searches on the land went back to 1880 and Circuit Judge Dick Wong ruled that the Richardson family had consistently acted as owners of the land, leasing it out, paying taxes on it, and using it as security.

The Imperial Hotel at Lewers Street and Kalia Road, Waikiki, in which **Ralph Cloward** is one of the principal shareholders, was acquired by Denny's Restaurants, Inc. for \$10 million. . . .

The Straub Clinic's long-anticipated expansion program, announced in June, 1957, is underway with the completion of a 288-car parking structure. A 226-bed hospital will follow. When completed, the facilities will be renamed the Straub Clinic and Hospital. In answer to past criticism that Honolulu does not need another hospital, a spokesman said, "We are not just adding a hospital. We have reached the point where expansion is necessary just to meet the needs of the clinic itself."

French Autograph Collection

A remarkable collection of holographic letters and autographs of famous Frenchmen, mostly physicians, has turned up in the basement of the Hawaii Medical Library.

In 1948, Professor Maurice Chevassu presented the letters and autographs, spanning almost a century, to a friend of his in the United States identified only as "*Cher Doyen et ami*."

Anyone having information about this collection is invited to communicate with the librarian.

NOTICES

POSTGRADUATE COURSE IN LARYNGOLOGY & BRONCHESOPHAGOLOGY

March 15 through 26, 1971

The Department of Otolaryngology of the Eye and Ear Infirmary of the University of Illinois Hospital and the Abraham Lincoln School of Medicine of the College of Medicine, University of Illinois at the Medical Center, will conduct a postgraduate course in Laryngology and Bronchoesophagology from March 15 through 26, 1971. This course is limited to fifteen physicians and will be under the direction of Paul H. Holinger, M.D. It will be held largely at the Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, and will include visits to a number of other Chicago hospitals.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois at the Medical Center, Post Office Box 6998, Chicago, Illinois 60680.

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SEVENTH ANNUAL POSTGRADUATE COURSE ON THE EVALUATION OF PULMONARY FUNCTION

"Pulmonary Function Testing: Who, What, When, How and Why?"

Sponsored by the American Thoracic Society, The Tuberculosis and Respiratory Disease Association of California, and The California Thoracic Society.

Location: University of California, San Diego, School of Medicine, La Jolla, California.

Dates: February 24, 25, and 26, 1971.

Course Size: The course will be limited to 100 participants.

Information and application forms may be obtained from: Tuberculosis and Respiratory Disease Association of California, 424 Pendleton Way, Oakland, California 94621.

In Memoriam continued from 578

The same article reported that he intended to visit Argentina, Chile, Central America, Mexico, and to return to the United States, where he was going to assume the direction of Portuguese periodicals in California and Hawaii. The story concluded with a statement from J. M. Marques of "O Luso," the weekly Portuguese newspaper in Honolulu, that the doctor was not assuming any position with his paper.

Dr. Pinto did, however, return to Honolulu on July 31, 1907, aboard the "Siberia." He went to Hilo and practiced there for a few months, leaving

in March, 1908. The following August he was back again and stayed for about a year. The next news of the doctor came in September, 1918, when a friend in Honolulu received a letter telling about his being with the Portuguese forces fighting in France.

Dr. Pinto was licensed to practice in California in 1922 and seems to have practiced in Los Angeles until his death, which occurred there on July 14, 1934. ■

Inside HMA continued from 579

for the immediate future. I think that almost every member of HMA will agree that our public relations are sick. Our public image is not good—and getting worse. As I said in the committee meeting, I think that it is past time we stopped trying to treat ourselves and call in a new expert—a new consultant. Someone with the ability and guts to tell us what is wrong and what we need to do to change it. Just as we wouldn't do our own legal work, but ask our lawyer what to do to keep out of trouble with the law, so we need to have someone who really can tell us what to do about our public image.

Aloha. ■

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Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 567

Arch. Int. Med. (April) 1970.

1. FALSE

"Constitutional reaction to a single sting of an hymenopteron occurred in 400 unselected patients. The average patient had a family history of allergy and a personal history of previous insect stings. Eight percent of patients, however, had no previous warning of anaphylaxis, and 6% received intravenous stings. Epinephrine hydrochloride was the drug of choice in the crisis. Of the patients who had received hyposensitizing treatments, 88% were protected against adverse reactions to subsequent stings."

2. FALSE

"Since tumors of the duodenum are rarely encountered by most clinicians, statistics and experience regarding these lesions are meager. Primary carcinoma of the duodenum has proved to be an almost uniformly fatal disease with reports of five-year survival still uncommon. The reasons for this circumstance are twofold. First and more important, the failure of clinicians and radiologists to suspect and establish the diagnosis early enough, when the lesion is still potentially curable. Second, the hesitancy of some surgeons to attack these lesions as aggressively as they do other gastrointestinal carcinomas."

3. TRUE

"In contrast to benign tumors, malignant tumors are more commonly found, eg. 13 of our 18 patients ranging in age from 38 to 88 years. These tumors almost invariably produce prominent if not characteristic symptoms."

4. TRUE

"Among the malignant tumors of the duodenum, carcinoma is the most common, leiomyosarcoma and lymphosarcoma together comprising only 10% of this group in large series. It has been said that inch for inch the duodenum is the most frequent site of malignancy in the small bowel. As one traverses the intestinal tract from the duodenum to the ileocecal valve, the incidence of carcinomas decreases and that of sarcomas increases."

5. FALSE

"For many years there have been questions as to the efficacy of antibiotics in the treatment of primary atypical pneumonia. The early observations, which did not differentiate various etiologic agents, yielded conflicting results. Meiklejohn et al, using clinical criteria for diagnosis, were able to show that tetracycline is effective in this disease. Development of procedures for identification of pneumonias caused by *Mycoplasma pneumoniae* permitted more reliable assessment of the effect of various antibiotics upon mycoplasmal pneumonia. Subsequently, studies conducted among military recruits showed that the tetracyclines and erythromycin reduced the morbidity of patient with *Mycoplasma pneumoniae*. Investigations in vitro have demonstrated inhibition of *M pneumoniae* by erythromycin and the tetracyclines as well as oleandomycin phosphate and other antibiotics."

6. TRUE

"The duration of fever, persistence of abnormalities in x-ray films, and length of hospitalization did not differ significantly between those patients from whom organisms were cultured after treatment and those with negative cultures following therapy. Five patients had a recurrence of their illness following cessation of antibiotic therapy; only one of these had a positive culture at the end of treatment."

7. TRUE

"Nafcillin sodium and oxacillin sodium are semi-

synthetic penicillins with similar antibacterial spectra. In vitro, they are equally active against penicillinase-producing staphylococci, while nafcillin is more active against hemolytic streptococci and pneumococci. Both are effective in the treatment of gram-positive infections including those caused by penicillinase-producing staphylococci. In addition to methicillin sodium, nafcillin and oxacillin are the penicillinase-resistant penicillins available at present for parenteral administration.

"A number of workers have observed that when equal doses are given orally or intramuscularly, the serum levels of nafcillin are lower than those of oxacillin."

8. FALSE

"A more important mechanism was suggested by the observation that, as compared to oxacillin, larger amounts of nafcillin were present in the rate livers in relation to the amounts in the plasma at all time intervals. There appeared to be, in addition to the influence of protein binding, a specific sequestration of nafcillin in the liver, the nature of which was not clear. In humans, Nunes et al demonstrated a similar remarkable affinity of the liver for nafcillin with tissues removed at surgery. There was an uptake by other organs as well, but it was smaller in amount and is difficult to evaluate because of difficulties with tissue assays and a lack of comparisons with other penicillins. Thus, the larger AVD of nafcillin seems to be due to a selective localization in the liver and possibly other tissues rather than to a greater diffusion out into the interstitial fluid."

9. TRUE

"It is widely appreciated that various infections may occur in patients with hematologic disorders, particularly in those whose immunologic mechanisms have been further compromised by chemotherapy. Tuberculosis is one of the infections commonly found in such patients. At times, however, tuberculosis may produce changes in the blood that are difficult to distinguish from underlying hematologic disease."

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- Hyperkalemia may occur, especially in severely ill patients with relatively small urine outputs or in patients receiving supplemental potassium. However, with Aldactone, because of its mechanism of action, hyperkalemia³ should be less likely than with triamterene or other agents which act independently of aldosterone.
- Gradual onset of action avoids the danger⁴ of sudden electrolyte and fluid depletion.
- May be effective as the sole diuretic or may be combined with a thiazide, furosemide⁵ or ethacrynic acid⁶.

Indications—Essential hypertension; edema or ascites of congestive heart failure, cirrhosis of the liver and the nephrotic syndrome; idiopathic edema. Some patients with malignant effusions may benefit from Aldactone, particularly when given with a thiazide diuretic.

Contraindications—Acute renal insufficiency, rapidly progressing impairment of renal function, anuria and hyperkalemia.

Warnings—Potassium supplementation may cause hyperkalemia and is not indicated unless a glucocorticoid is also given. Discontinue potassium supplementation if hyperkalemia develops.

Usage of any drug in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the mother and fetus.

Precautions—Patients should be checked carefully since electrolyte imbalance may occur. Although usually insignificant, hyperkalemia may be serious when renal impairment exists; deaths have occurred. Hyponatremia, manifested by dryness of the mouth, thirst, lethargy and drowsiness, together with a low serum sodium may be caused or aggravated, especially when Aldactone is combined with other diuretics. Elevation of BUN may occur, especially when pretreatment hyperazotemia exists. Mild acidosis may occur. Reduce the dosage of other antihypertensive drugs, particularly the ganglionic blocking agents, by at least 50 per cent when adding Aldactone since it may

potentiate their action.

Adverse Reactions—Drowsiness, lethargy, headache, diarrhea and other gastrointestinal symptoms, maculopapular or erythematous cutaneous eruptions, urticaria, mental confusion, drug fever, ototoxicity, gynecomastia, mild androgenic effects, including hirsutism, irregular menses and deepening voice. Adverse reactions are infrequent and usually reversible.

Dosage and Administration—For essential hypertension in adults the daily dosage is 50 to 100 mg. in divided doses. Aldactone may be combined with a thiazide diuretic if necessary. Continue treatment for two weeks or longer since an adequate response may not occur sooner. Adjust subsequent dosage according to response of patient.

For edema, ascites or effusions in adults initial daily dosage is 100 mg. in divided doses. Continue medication for at least five days to determine diuretic response; add a thiazide or organic mercurial if adequate diuretic response has not occurred. Aldactone dosage should not be changed when other therapy is added. A daily dosage of Aldactone considerably greater than 75 mg. may be given if necessary.

A glucocorticoid, such as 15 to 20 mg. of prednisone daily, may be desirable for patients with extremely resistant edema which does not respond adequately to Aldactone and a conventional diuretic. Observe the usual precautions applicable to glucocorticoid therapy; sup-

plemental potassium will usually be necessary. Such patients frequently have an associated hyponatremia—restriction of fluid intake to 1 liter per day or administration of mannitol or urea may be necessary (these measures are contraindicated in patients with uremia or severely impaired renal function). Mannitol is contraindicated in patients with congestive heart failure, and urea is contraindicated with a history or signs of hepatic coma unless the patient is receiving antibiotics orally to "sterilize" the gastrointestinal tract.

Glucocorticoids should probably be given first to patients with nephrosis since Aldactone, although useful for diuresis, will not directly affect the basic pathologic process.

For children the daily dosage should provide 1.5 mg. of Aldactone per pound of body weight.

References: 1. Dall, J. L. C.: *Amer. Heart J.* 70:572-574 (Oct.) 1965. 2. Liddle, G. W.: *Ann. New York Acad. Sci.* 139:466-470 (Nov.) 1966. 3. Gontt, C. L.: *Diuretic Therapy*, DM (Disease-A-Month), Chicago, Year Book Medical Publishers, Inc., 1967, pp. 1-31. 4. Alexander, S.: *Geriatrics* 23:131-139 (Nov.) 1968. 5. Stason, W. B., and others: *Circulation* 34:910-920 (Nov.) 1966. 6. Lieberman, F. L., and Reynolds, T. B.: *Gastroenterology* 49:531-538 (Nov.) 1965.

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Contraindicated: Known hypersensitivity to the drug. Children under

6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

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November-December, 1970

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Hepatitis-Associated Antigen
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(1) Siver, R. H.: CMD, 21:109, September 1954. (2) Frykman, H. H.: Minn. Med., 38:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., 51:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., 15:15-16, October 1965. (5) Weekes, D. J.: NY State Jour. Med., 58:2672-2673, August 1958. (6) Ellis, S. and Spratt, J. S.: JOUR. AMER. GER. SOC., 18:410-415, May 1970.

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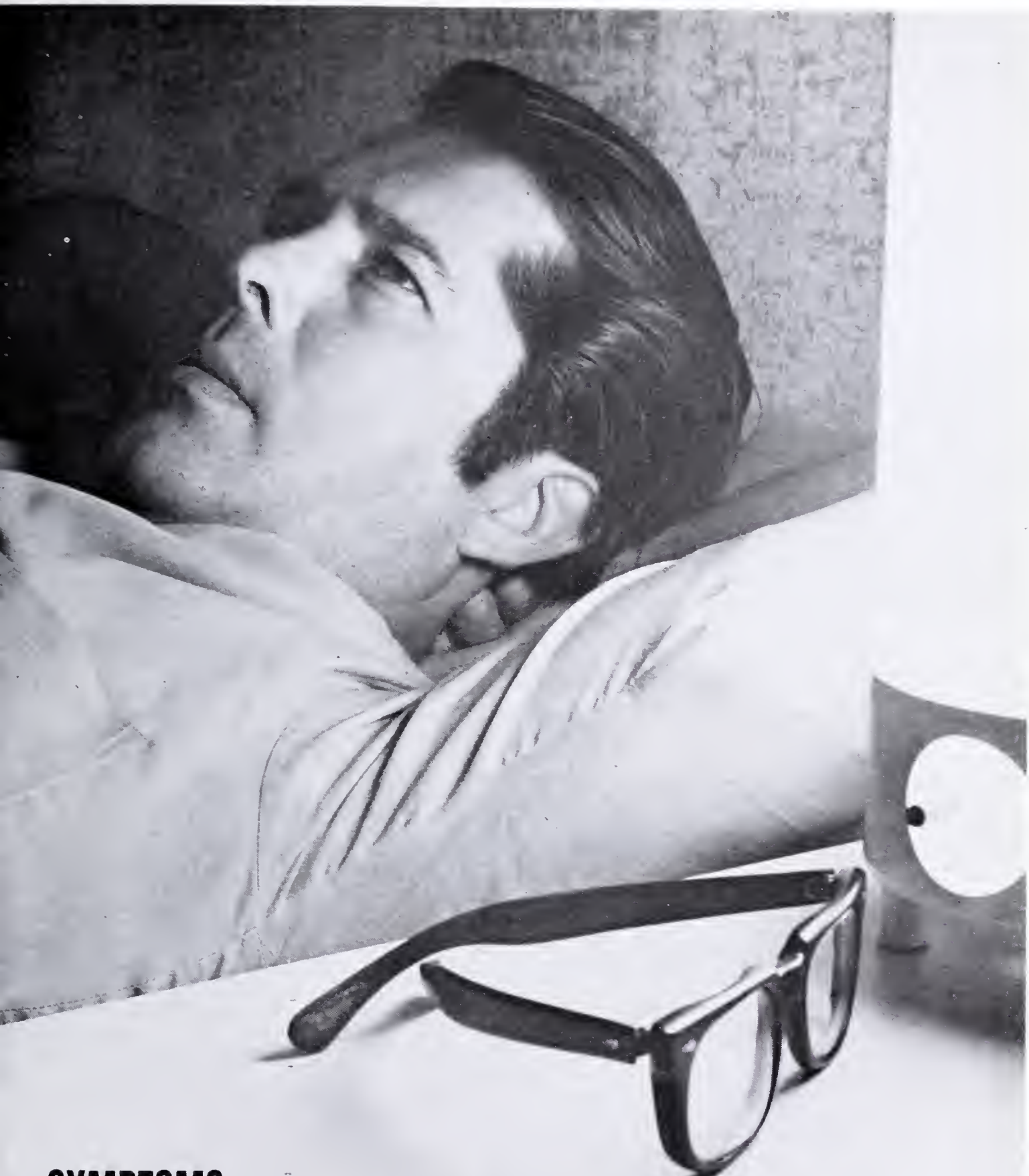
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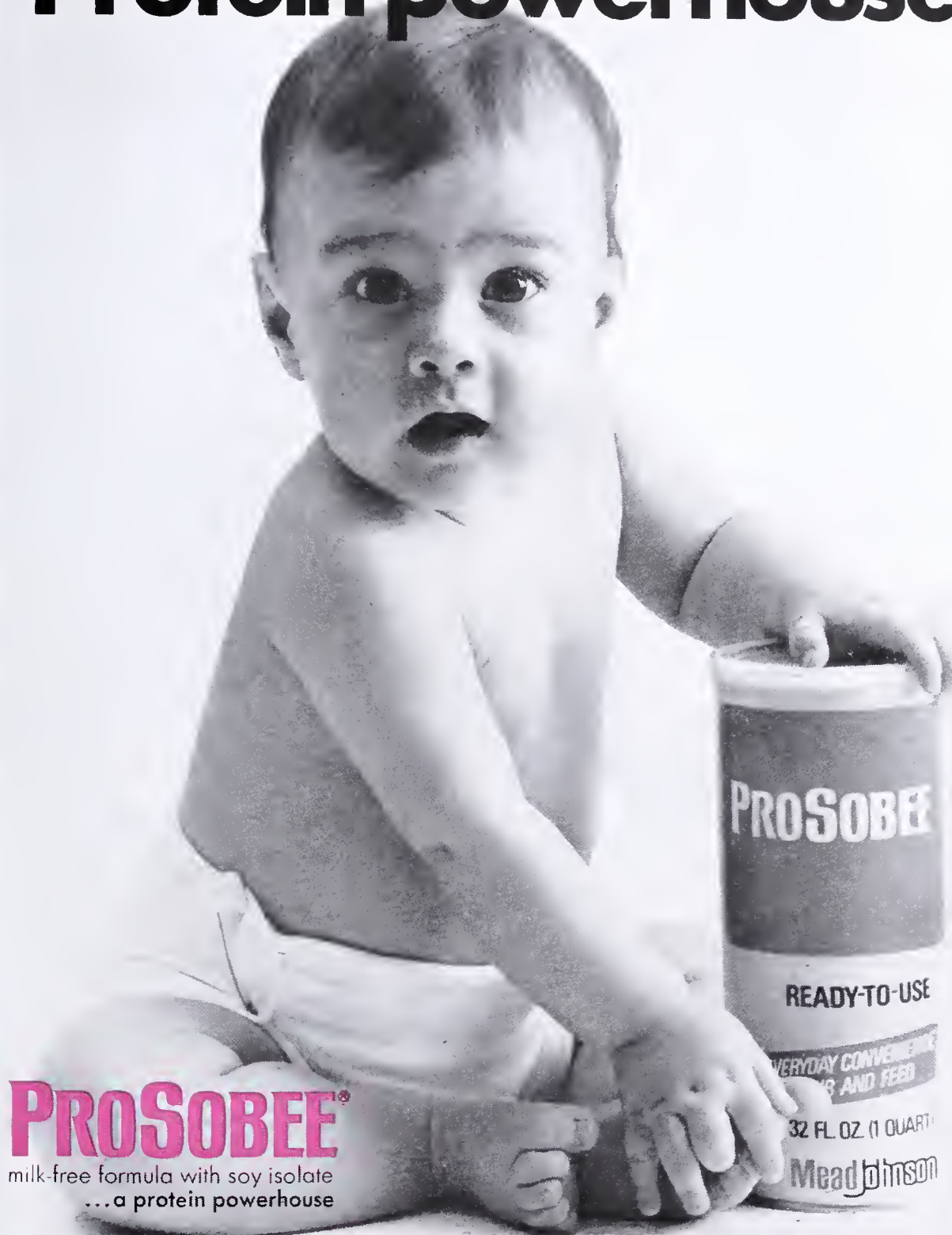
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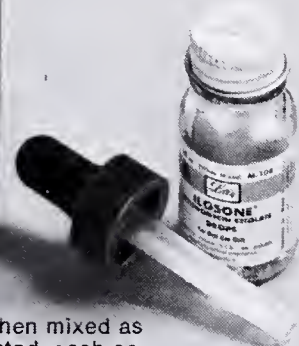
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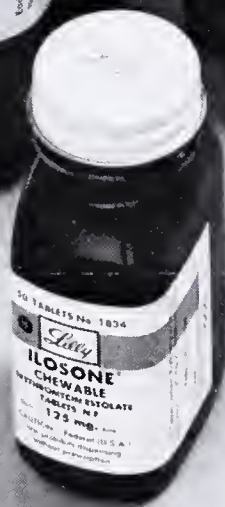


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*The incidence of Australia antigen in Hawaii
corresponds to that in North America and Europe.*

Hepatitis-Associated (Australia) Antigen in Hawaii

GLADYS S. Y. LIU,* SYDNEY A. BURRELL† and MITSUO YOKOYAMA, M.D., Honolulu

● *The incidence of Australia antigen in the normal population of Hawaii is 0.12%. This incidence is similar to that of Europe and North America and is much lower than that of southeast Asia and southwest Oceania.*

Australia antigen seems to be a transmissible agent.

Among diseased groups in Hawaii the incidence of Australia antigen (0.29%) is higher than that in the normal population.

The present results show that the incidence of Australia antigen among lepromatous leprosy patients in Hawaii is higher than the incidence in both the diseased and normal groups.

No Australia antibody was found in this study.

IN 1961, ALLISON and Blumberg^{1, 2, 3} discovered precipitating antibodies that reacted with human serum beta-lipoproteins in the blood of patients who had received numerous blood transfusions. These reactions were demonstrated by the formation of precipitin lines in agar-gel. Subsequently, studies⁴ demonstrated that an antigen was inherited as an autosomal dominant character (allotype) and was identified as a component of low density beta-lipoprotein. Further studies revealed that beta-lipoproteins had two separate genetically controlled allotype systems, the Ag and Lp systems, which contained antigenic specificities or alleles.

In 1963, serum from hemophiliac patients who had received numerous transfusions was tested by

Blumberg and associates⁵ for the existence of isoprecipitins by utilizing 24 panel serum samples from normal individuals. The testing revealed that serum of two of the hemophiliac patients formed distinct precipitin lines with serum from an Australian aborigine differed from previously reported Ag and Lp antigens and was named "Australia antigen."^{5, 6}

Other investigators have found other antigens, called hepatitis antigen,⁷ serum hepatitis antigen (SH),⁸ and hepatitis-associated antigen (HAA),⁹ which are probably identical to the Australia antigen.^{9, 10, 11}

Population studies are being conducted to find the incidence of Australia antigen in normal individuals in different geographic areas. Thus far, the Australia antigen seems to be extremely rare in the normal populace of North America and Europe (0.1%),⁶ but the incidence of the antigen in southeast Asia and the tropical Pacific Basin is higher.⁶ For instance, results indicate that the antigen occurs in 7% of Micronesians, 6% of Vietnamese, 6% of Filipinos, and 3% of Indians from south India.^{6, 12}

The antigen is found in relatively high frequencies in patients with acute and chronic lymphocytic leukemia, acute myelogenous leukemia, lepromatous leprosy, and viral hepatitis, all of which are associated with impairment of immunological defenses.^{6, 13} These data are of significance because the antigen has not been detected in other diseases such as cirrhosis, infectious mononucleosis, and hepatoma.^{14, 15, 16}

Tests have shown that serum glutamic pyruvic transaminase (SGPT) levels are higher in patients with Australia antigen than in those without the antigen. Similarly, an increase in SGPT levels is also present in subjects with chronic anicteric hepatitis and acute hepatitis.^{6, 17}

Kuakini Medical Research Institute and Kuakini Hospital.
This study was supported by the McNerny Foundation and Hawaii Open Golf.

* Freshman at University of Hawaii.

† Senior at Leilehua High School.

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Various investigators have indicated that the Australia antigen is a transmissible agent. Turner and associates¹⁸ have reported that following an outbreak of viral hepatitis in an English hospital hemodialysis unit, the affected personnel and patients have reacted positively for Australia antigen. A study has shown that patients with Down's syndrome living in large institutions of 1,100 or more individuals have a higher incidence of Australia antigen than similar patients living in small institutions of 20 to 50 individuals.^{6, 17} The findings of Blumberg *et al.*,⁶ revealing higher than normal incidence of Australia antigen among patients receiving frequent transfusions, and studies by Okochi and Murakami,¹⁹ have indicated that Australia antigen can be transmitted through blood transfusions.

Studies done on families possessing the antigen in Cebu Island, the Philippines, and Bougainville, Trust Territory of New Guinea, suggest that susceptibility to the Australia antigen is transmitted as an autosomal recessive trait.²⁰

In testing serum samples for Australia antigen and antibody, various techniques have been applied. The Ouchterlony double immunodiffusion method^{21, 22} is widely used. This test involves diffusion of serum in agar-gel. Noble agar, ion agar, and agarose have been used as reaction media in detecting Australia antigen and antibody. A positive reaction is denoted by a distinct precipitin line. Screening of samples has also been done with cross-over electrophoretic techniques (immuno-electrosmophoresis) using preformed microporous cellulose-acetate membrane,^{22, 23} agar, or agarose.^{24, 25} A complement fixation test developed by Purcell and associates²⁶ detects and measures Australia antigen and antibody.

The isolation of the Australia antigen has been reported by Blumberg and associates.¹⁵ Utilizing the electron-microscope, the antigen appears to be a particle with a diameter of 20nm (200 Angstroms) with knob-like subunits on its surface.^{15, 27} The appearance of the Australia antigen is said to be similar to that of a virus.²⁷

The objectives of this study were (1) to find the incidence of the Australia antigen and antibody in Hawaii by testing sera of normal and diseased groups, and (2) to determine the correlation between the presence of Australia antigen and antibody and a particular disease.

MATERIALS AND METHOD

Serum samples from hospital patients with a variety of diseases were obtained from Kuakini Hospital and Wahiawa General Hospital. The Blood Bank of Hawaii (BBH) supplied serum from blood donors and patients requiring cross-matching. Serum was also obtained from the Hono-

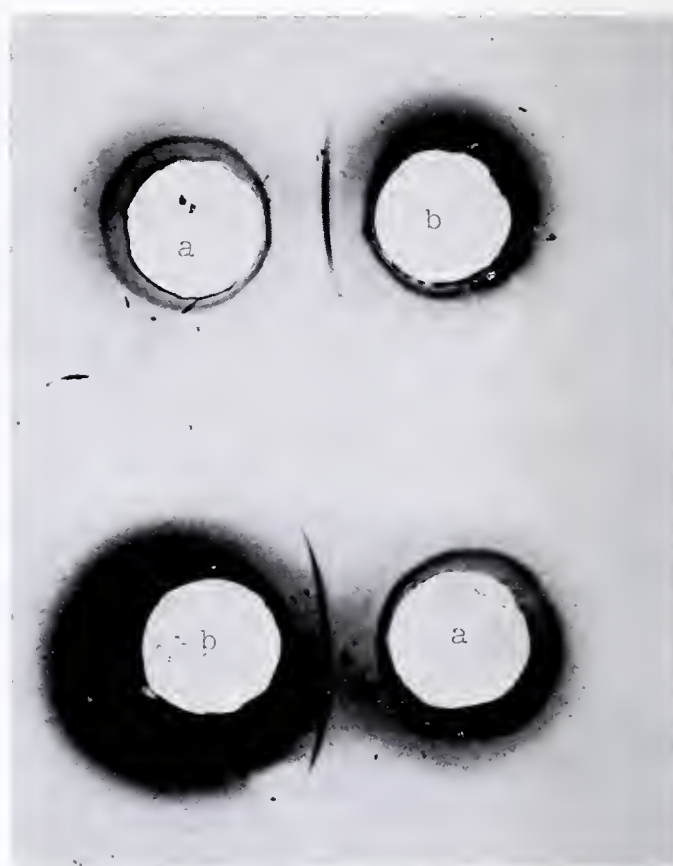


FIG. 1.—a. Serum containing Australia antibody (Au-Ab). b. Serum containing Australia antigen (Au-Ag). In the use of the Ouchterlony double immunodiffusion method, a positive reaction is denoted by a distinct precipitin line. The precipitate arcs toward the well containing Australia antigen.

lulu Heart Program (HHP) participants. Serum samples from subjects with lepromatous and tuberculoid leprosy were supplied by Hale Mohalu Hospital. Dr. Paul V. Holland, Clinical Center Blood Bank, National Institutes of Health, initially supplied sera containing Australia antigen and antibody, respectively; Mr. Eizo Yamate, Hemodialysis Unit, Tsuchiya Hospital, Hiroshima, Japan, supplied sera containing Australia antibody.

In testing the serum samples for Australia antigen and antibody, the micro-Ouchterlony double immunodiffusion test was applied. Agar plates were prepared using 3¼" x 4" glass slides which had been precoated with 5 ml of 0.5% Noble agar in distilled water and coated with 16 ml of 1.25% Noble agar in 0.05M barbital buffer, pH 8.6. (As a preservative, one drop of 0.1% sodium azide in distilled water was added to each 16 ml of 1.25% agar solution). The agar plates were refrigerated for at least one hour before use. The agar-gel was cut with a 7-well Ouchterlony template which has a center well encircled by 6 wells. The wells, each being 2 mm in diameter and holding 7 lambdas, are 3 mm apart. The center wells were filled with serum containing known Australia antigen when testing for Australia antibody and with serum containing known Australia antibody when testing for Australia

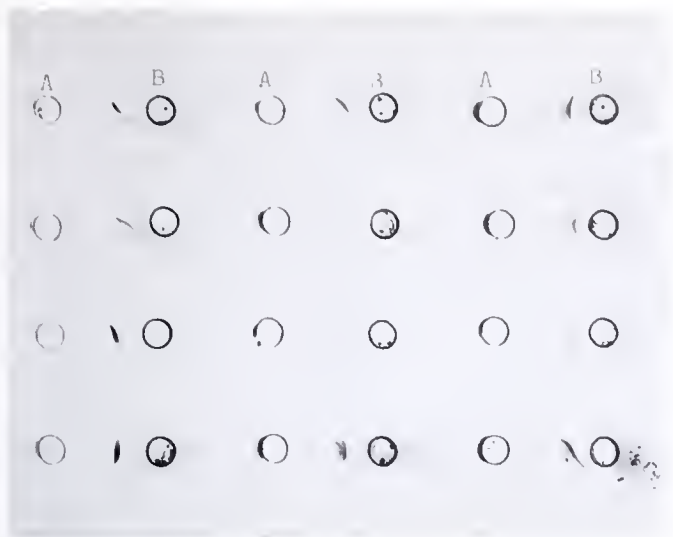


FIG. 2.—*Au-Ab* positive wells of column A are on the anode side. *Au-Ag* positive wells of column B are on the cathode side. In the employment of the cross-over electrophoretic technique (immunoelectroosmophoresis) using agar, the positive reaction is indicated by a precipitate which forms close to the *Au-Ag* well.

antigen. Each peripheral well was filled with a different serum sample. The serum containing Australia antigen was tested against that containing Australia antibody as a control. The agar plates were incubated in a moist chamber at room temperature for at least 16 hours after the test sera had been placed in the wells.

The serum samples which showed weak, doubtful, or positive reaction in Ouchterlony agar plates were also tested by immunoelectroosmophoresis (IEOP) for confirmation of the reactions. The wells were made on the agar plate 1 cm apart and the sera containing Australia antibody was placed on the anode side and test samples were on the cathode side. Electrophoresis was run on a 25 mA per cm for 1.5 hrs. The precipitin formations were thereafter analyzed before and after staining the plate.

Immunoelectrophoresis in agar-gel was carried out for detection of the region where the precipitin reaction took place. After electrophoresis of serum containing Au antigen a trough was filled with serum containing Au antibody.

RESULTS

Figure 1 shows the reaction between the serum containing Australia antibody and the serum possessing the antigen. The positive precipitin arc was formed on the antigen side along the well. When applying immunoelectroosmophoresis positive reaction was formed as non-uniform precipitin line near the antigen wells (Figure 2).

The reaction between Au antigen and antibody in immunoelectrophoresis was found near the origin toward the anode in the β -region (Figure 3).

The incidence of Australia antigen in the normal and diseased groups are shown in Table 1.

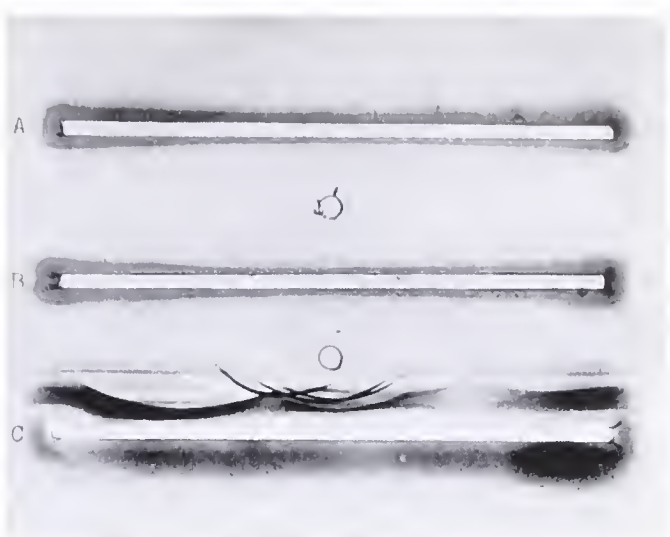


FIG. 3.—Troughs A and B contained *Au-Ab* positive serum. Trough C contained goat antihuman serum. The two wells were filled with *Au-Ag* positive serum. Immunoelectrophoresis in agar-gel showed *Au-Ag* positive precipitin line in the β -region.

In the normal group, 12 (0.19%) of 6388 serum samples from the BBH blood donors were positive for Australia antigen, and none of the 3865 HHP participants were positive. Thus, 0.12% of the "normal" group was positive for Australia antigen. Eight of the 2800 (0.29%) in the diseased group were found to have Australia antigen. No Australia antibody was found in this study.

Three (0.15%) of the 1941 Kuakini Hospital patients and none of the 263 Wahiawa General Hospital patients were positive for Australia antigen. Only one (0.21%) of the 487 cross-matching patients tested had Australia antigen. The BBH cross-matching patient's serum which was positive for Australia antigen was also obtained from Kuakini Hospital. Of the 109 patients tested from Hale Mohalu Hospital, five (4.6%) had Australia antigen.

The three patients from Kuakini Hospital (one being the BBH cross-matching patient with Australia antigen) who possessed Australia antigen had diagnoses of carcinoma of the rectum, chronic myelogenous leukemia, and acute myocardial infarction, respectively. The former two patients had records of multiple blood transfusions within a period of three months before the tests.

TABLE 1.—*Incidence of Australia antigen in Hawaii.*

SOURCE OF SERUM SAMPLE	NO. TESTED	AU-AG POS.
BBH Blood donors	6388	12 (0.19%)
HHP participants	3865	0 (0%)
BBH cross-matching patients	487	1 (0.21%)
Kuakini Hospital patients	1941	3 (0.15%)
Wahiawa General Hospital patients	263	0 (0%)
Hale Mohalu Hospital patients:		
Lepromatous leprosy	97	5 (5.2%)
Tuberculoid leprosy	12	0 (0%)

The sera from Hale Mohalu Hospital were from patients with lepromatous or tuberculoid leprosy. All of the tested serum samples which contained Australia antigen were from patients with lepromatous leprosy.

DISCUSSION

This study was conducted to determine the incidence of Australia antigen in Hawaii because of Hawaii's unique population composition and geographic location. Hawaii is located in Oceania, over 2,000 miles from North America and over 4,000 miles from Asia. The population of Hawaii is composed of immigrants and their descendants: Orientals from the Philippines, China, Japan, and Korea; Caucasians and Negroes from North America; and polynesians. A comparison was made of the incidence of Australia antigen in Hawaii and that of North America, which Hawaii is geographically near; that of Asia, which has a similar population composition; and that of the rest of Oceania.

In this study, the incidence of Australia antigen in the normal population of Hawaii was 0.12%. This incidence is close to the determined incidence of Australia antigen in the normal population of North America and Europe,⁶ 0.1%. This is lower than that of other areas of Oceania.⁶ Despite the fact that the population of Hawaii is composed of various Asian races, the incidence of Australia antigen in Hawaii is also much lower than that of Asia.⁶

Okochi and Murakami¹⁹ and Blumberg *et al*⁶ have proven that Australia antigen is transmissible through blood transfusions. In this study, two of the patients found to have Australia antigen had received numerous transfusions over an extended period, and the antigen may have been transmitted to these patients in this manner.

In this study the incidence of Australia antigen in the diseased group is higher than that of the tested normal group. This higher incidence is expected because Australia antigen is associated with various diseases and is transmissible through blood transfusions.^{6, 19}

Studies of the normal and diseased subjects found to have Australia antigen revealed different individual reactions. In the patients tested, the antigen may have been a direct disease agent. On the other hand, the BBH blood donors positive for Australia antigen were carriers of the antigen while experiencing no ill effects. The present study suggests that Australia antigen is not directly associated with the appearance of clinical symptoms of hepatitis. Therefore, it can be classified into two groups that hepatitis is associated directly with Australia antigen or without the antigen.

Previous investigators found that Australia

antigen may be present for days, weeks, or years.^{6, 18} In this study the patient who was positive for Australia antigen was followed for one month before his death. The persistence was probably due to the numerous transfusions this patient received.

Another incident demonstrating the various antigen persistence periods was that of a BBH blood donor who was positive for Australia antigen in May and again in August of 1970. In addition, it is interesting to note that during the testing of BBH donors for Australia antigen, several positives were found on the same days. Further investigation revealed that these serum samples were obtained from donors who gave blood on the same or consecutive days and at the same location. These findings suggest that Australia antigen is possibly a transmissible agent. Background information on the BBH blood donors with Australia antigen revealed no significant correlation as regards to residence or occupation.

The results obtained in this study confirm earlier findings of a higher than normal incidence of Australia antigen among lepromatous leprosy patients,^{6, 28} much higher than the determined incidences of both the normal group and the diseased group. The incidence of Australia antigen among tuberculoid leprosy patients reported here, 0%, contrasts with the 3.4% reported earlier by Blumberg and associates.^{6, 28} This discrepancy may be due to the small number of tuberculoid leprosy subjects tested in our study.

Due to the small number of patients found to have Australia antigen, no conclusions which correlate the presence of Australia antigen and acute myocardial infarction, carcinoma of the rectum, and chronic myelogenous leukemia can be drawn. Sutnick *et al* have found a higher than normal incidence of Australia antigen in chronic myelogenous leukemia patients (2.7%).¹³ As compared to chronic myelogenous leukemia, the incidence of Australia antigen is higher in other forms of leukemia such as acute lymphocytic leukemia (9.8%), chronic lymphocytic leukemia (6.7%), and acute myelogenous leukemia (9%).¹³

Out of the 13,053 subjects tested in the diseased and normal groups, no Australia antibody was found in this study.

ACKNOWLEDGMENTS

The authors would like to thank the personnel at the Blood Bank of Hawaii, Kuakini Hospital, Wahiawa General Hospital, the Honolulu Heart Program, and Hale Mohalu Hospital who prepared and provided the sera used in this study. We are also indebted to the McInerny Foundation and Hawaii Open Golf without whose support this study would not have been possible.

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COOPER HOSPITAL QUIZ

American Journal of Medicine (May) 1970

- (1) When Dr. Addison first described pernicious anemia, he carefully documented the triad of glossitis, jaundice and neurological symptoms. TRUE or FALSE
- (2) If pernicious anemia follows total gastrectomy, it usually does so in:
(a) 1 year (b) 2 years (c) 5 or more years
- (3) There is no genetic background in pernicious anemia. TRUE or FALSE
- (4) Vitamin B₁₂, after binding with the intrinsic factor of the stomach, is absorbed:
(a) in the stomach (b) in the duodenum (c) jejunum (d) ileum
- (5) The pathogenesis of the neurologic lesions of pernicious anemia are not understood. TRUE or FALSE
- (6) The anemia of folate deficiency is easily distinguished from the anemia of B₁₂ deficiency. TRUE or FALSE
- (7) Vitamin B₁₂ is synthesized almost entirely by microorganisms. TRUE or FALSE
- (8) Clams, crabs and oysters are excellent sources of vitamin B₁₂. TRUE or FALSE
- (9) There are several causes of malabsorption of B₁₂ including intraluminal agents such as bacteria or parasites. TRUE or FALSE
- (10) Folic acid deficiency is frequently due to a congenital defect in absorption. TRUE or FALSE
- (11) Patients with inborn error of folic acid metabolism have mental retardation; those with adult onset of folate deficiency have only sleeplessness, forgetfulness, and irritability. TRUE or FALSE
- (12) Defective DNA synthesis, producing megaloblastosis, most frequently arises from B₁₂ or folate deficiencies. TRUE or FALSE

Answers will be found beginning on page 666

Brucellosis is under fairly good control in Hawaii, but it is an ever-present threat.

Brucellosis in Hawaii

WILLIAM N. BERGIN, M.D., and WILLIAM C. BERGIN, D.V.M., *Hilo*

● *Brucellosis is a specific contagious disease primarily affecting cattle, swine and goats, caused by bacteria of the brucella group and characterized by abortion in the female, orchitis and accessory gland infection in the male and infertility in both sexes.*

*In Hawaii, this disease is primarily a problem of cattle only. There have been no reports of caprine brucellosis (*Br. melitensis*) and it is believed that this organism is not present in the islands. In swine, the primary causative agent in Hawaii is *Br. abortus*. Until recently, feral porcine brucellosis was not a concern, but the use of infected bovine offal for feed has introduced the problem. Since both caprine and porcine brucellosis are not of primary importance, this discussion will be centered around *Brucella abortus* and its role in human and veterinary practice in Hawaii.*

ON DEAR Dark Rosaleen's Isle it is said that if you ask an Irishman a question he will likely reply "I don't know, but I'll tell you."

My personal experience with brucellosis over the past 37 years has been limited to two cases, both of them Scottish exiles who had contracted the disease, and had been diagnosed, in Scotland. Those were preantibiotic days, and the treatment was limited to analgesics, antipyretics, rest, and lots of kind words. They both recovered and lived comfortably for many years; one of them succumbed to the cardiac consequences of his youthful indiscretions, and the other to an honest myocardial infarct at the age of 68.

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I don't know—so I'll tell you.

The disease has been called "undulant" fever when it didn't undulate; "Mediterranean" fever, perhaps after the voyages of Ulysses; and "Malta" fever after the island where large numbers of British troops were incapacitated by it and where it was originally recognized as an entity. Other names given it have been: rock, Neapolitan, Cyprus, goat, Rio Grande, Texas, dust, slow, mountain, Gibraltar and mittelmeer fever. Most properly and logically it is now called brucellosis, after David Bruce, undoubtedly a direct descendant of the spider-watching High King of Seotia, Robert the Bruce.

At the 137th annual meeting of the British Medical Association in Aberdeen a most interesting clinical and historical exhibition was presented by Drs. John Rizzo Naudi and Paul Cassar of the Malta branch of the British Medical Association,¹ showing the natural history, epidemiology, and pathology of brucellosis, with emphasis on the clinical features—particularly the bone and joint complications. Temperature charts were shown illustrating the effect of treatment, along with papers on control and eradication by Skone¹ (Bristol). The presentation was of such interest and quality that one felt that a bagpipe band and a color guard of the Caledonian clans should have been marching about the museum.

HISTORY

Historically, the disease is exquisitely interesting, and any discussion would be incomplete if it failed to honor the names and memories of those who have constructed this medical monument.

In 1863 Marston,² a Royal Army Surgeon, presented a report of his own illness, distinguishing it from typhoid fever, and in 1887 David Bruce² described the gram-negative eoeo-bacillus and the disease. In 1897 the Dane, Bang,³ found that Bruee's eoeo-bacillus was the cause of abortion in cattle, and so it is known in veterinary medicine as "Bang's disease." In 1897 the classic paper by M. L. Hughes⁴ entitled "Mediterranean, Malta, or Undulant Fever" was published. In 1897, too, Wright and Semple² described the agglutination test we know today as the standard agglutination test (SAT) in animals and man.

The reports of the Mediterranean Fever Commission⁵ appeared in 1905 and 1907, and in 1914 Jacob Traum⁶ isolated the porcine strain of *Brucella suis*. In 1918 Alice C. Evans⁷ differentiated *Brucella melitensis* from *Br. abortus* serologically, and showed that human disease could result from drinking raw cow's milk. In 1932, Strain 19 of *Br. abortus* was isolated by Cotton and Buck⁸ and from it an attenuated vaccine was prepared and remained the standard immunizing agent in cattle until 1967, when its use was restricted, as it produced false positives and confused herd testing procedures.

Subsequently, McEwan, and Priestly in 1938 described their 45/20 strain and Huddleson in 1947 described his mucoid vaccine.⁹ These latter two vaccines have not been widely used in this country but do have the advantage of not producing high titers in immunized cattle.

According to Spink,⁹ writing in Harrison's *Principles of Internal Medicine*, the first human case in the United States, in a nurse in Washington, D. C., was described by Craig in 1906. In 1924 Keefer described the first human case of brucellosis in this country due to organisms other than *Br. melitensis*.

WORLDWIDE DISTRIBUTION

The bovine, porcine, and caprine strains are found in animals throughout the world, both carnivores and herbivores. Bison, elk, moose, wild hares, chickens, dogs, cats, rats, mice, and guinea pigs are known to be infected.¹⁰ The Department of Agriculture has tested a limited number of wild deer from Lanai during the past few months and no serum antibody was found. A few wild pigs from the Kamuela and Kona districts have been serologically examined for brucellosis during the past several years. Negative results were obtained from Kamuela, and until recently from Kona, where several pigs sampled had measurable titers.¹¹

Only one *Brucella* isolation has been made from a wild pig. This occurred over ten years ago in Kona. The pig, penned for at least six months,

sickened and died; *Brucella suis* was demonstrated. A large number of wild goats from Pohakuloa, Kalapana, and Voleano National Park were blood-tested several years ago. Titers were found in a very small percentage. There is no record of wild jackasses having been tested for brucellosis.¹¹

In humans it is usually an occupational disease of farmers, veterinarians, butchers, livestock producers, and slaughterhouse employees (especially eviscerators), and of those who drink milk or eat cheese or butter prepared from raw milk. There is a special danger when the uterus is opened during evisceration. As recently as 1965 there was an outbreak of *Br. melitensis* infection in London¹² from the ingestion of pecorino cheese made in Italy from raw sheep's milk. In our State our hunters are exposed to this disease as they usually eviscerate animals in the field. Our Filipino population have an especial fancy for the entrails of animals, and favor goat and donkey meat.

In human infections the strains vary according to the dominant animal population of the area. In the hog belt of the midwest *Br. suis* is the most common strain affecting humans, whereas in Wisconsin and Minnesota, our dairyland, *Br. abortus* predominates; in Mexico *Br. melitensis* is both epidemic and epizootic and as a result cases in our southern states bordering Mexico are often found due to *Br. melitensis*.²

Brodie¹³ studied 1395 cases seen at City Hospital, Aberdeen, from October 1966 to April 1969. Of these only 130 lived in the City of Aberdeen, where the great bulk of the milk supply is pasteurized. He divided these into three groups according to the levels of the antibodies demonstrated: Group A, with high levels in one or more tests (1:800 or over SAT or AHG, or 1:64 or over for CFT). Group B had intermediate levels (1:400 or 1:200 for SAT* and/or AHG† or 1:32 or 1:16 for CFT‡). Group C represented low antibody levels. Of the 1,395 seropositive individuals, 176 were in the high antibody level group. Only four of them lived in the city of Aberdeen and three of these were veterinary surgeons. The fourth had recently spent a holiday on a farm outside the city. The remaining 172 were rural, and 53% of these were in risky occupations (farm connections and veterinary surgeons). There were 274 in the intermediate antibody-level group (and again only 25 lived in Aberdeen itself): 251 rural, with 36% in risky occupations. There were 945 in the low antibody group, and only 102 of them were urban residents. The remaining 842 were rural, with 21% as occupational risks.

State regulations concerning dairy hygiene,

* Standard Agglutination Test.

† Anti-human Globulin (Coombs).

‡ Complement fixation test.

husbandry, and milk production and processing in the State of Hawaii are comprehensive, and protect the people of Hawaii from contaminated milk and milk products.¹⁴

During the years 1952-67 in Hawaii there were 29 cases of human brucellosis reported.¹⁵ Three of them occurred on the island of Hawaii, 24 on the island of Oahu, and two on Maui. As is characteristic of the disease, women and children are either more resistant or less often exposed, or both. Seven of these were women, one a child of six, and two children of 13, and the remainder were men aged 19 to 63. Of the seven females infected, three were hog raisers; one a nurse whose infection was from cheese; a housewife who acquired the infection off shipping; and a saleswoman and a housewife with undetermined sources of infection. Of the infected individuals, 18 were hog raisers, hunters, or butchers. There was one death, in an individual 63 years of age.

While we have had a very effective brucellosis campaign in Hawaii these many years, one can only wonder if we haven't missed a few cases of this esoteric disease.

CLINICAL COURSE

Mr. Maitland Mackey¹⁶ (Chairman of the Aberdeen and District Milk Marketing Board), a dairy farmer, producer, distributor, and victim, spoke intimately of the disease. He described the most dominant symptom as malaise and weakness. He said he felt fairly well while resting, but had no taste for mental or physical exertion. He became exhausted easily and his spirit and enthusiasm were diminished. He described a feeling of "chilliness" (and less often frank chills) preceding a rise in temperature. He remarked on the profuse nocturnal sweats.

Another farmer, victim of the disease, described to Dr. C. D. Needham¹⁷ (consultant physician, Aberdeen General Hospitals) as follows: "You arise several times during the night, pour the water out of the bed, and get back in."

The incubation period is usually five to twenty-one days. Generalized aches and pains, headaches, pain in the thoracolumbar spine, abdominal pain, arthralgia, and periarticular swelling, usually without redness or heat, are par for the course. Anorexia and constipation are usual, but at times it is ushered in with diarrhea. About half the patients have enlarged peripheral lymph nodes and splenomegaly or hepatomegaly.

Contrary to the classic description of the disease, the temperature does not exhibit a remittent or undulating type of fever; the usual course is intermittent fever with diurnal variations (95°, 100°, 104°F) but occasionally the fever is sustained. Afternoon elevations of temperature and

night sweats are not uncommon.

Intermittent tachycardia, labile blood pressure, and cold, moist palms and soles occur. There may be amenorrhea. Gross tremors of the fingers and tongue, irritability, mental depression, and visual disturbances are common and indicate a shocking impact on the central nervous system, which may trigger a display of underlying neurosis. The symptoms of neurosis may persist long after the infection has subsided. Abortions in humans are not common, but have been known to occur.²

COMPLICATIONS

Encephalitis and meningitis, usually chronic, associated with ocular complaints and diminution in hearing, peripheral neuritis, (at times excruciating) radiculo-neuritis often associated with spondylitis, destructive bone lesions with involvement of the spine (most often the thoracolumbar) and characterized by a destruction of the intervertebral discs and adjoining vertebral bodies. It also causes a destructive, suppurative arthritis, usually attacking but a single joint—Brodie's-abscess-like lesions. Vegetative bacterial endocarditis, pulmonary infiltration and pleural effusions may occur. Serious hepatitis is rare, but it may be a factor in the genesis of cirrhosis. Occasionally, as in animals, orchitis, cystitis, and nephritis occur.

The report of the Mediterranean Fever Commission⁵ stated that 85% of the patients recovered within three months. At the University of Minnesota Hospitals a study conducted from 1937 to 1956 showed that 80% of the patients had recovered within three to six months, and not less than 20% had residuals after one year. The mortality rate is not greater than 0.66%.²

RADIOLOGICAL DIAGNOSIS

X-rays of the bones, particularly the thoracolumbar spine, resemble osteoarthritis of the spine. Destruction of the intervertebral discs and adjoining vertebral bodies with destructive suppurative arthritis, usually of one joint, may occur.

PATHOLOGY

The disease localizes particularly in the reticulo-endothelial system, bone marrow, liver, and spleen, and the cellular response is similar to that found in sarcoidosis, tuberculosis, and syphilis.

LABORATORY DIAGNOSIS

In the peripheral blood the leucocytes are usually normal or reduced, and a relative lymphocytosis exists. The sedimentation rate is of no diagnostic value. The sternal bone marrow may reveal granulomas which are characteristic of but not

specific for, brucellosis. The opsonocytophagic test is of little value.

Intraperitoneal guinea pig inoculation is extremely reliable, and serves to differentiate *Br. suis* from the other two strains. Our Department of Health laboratory stresses the importance of blood culture plus serum for agglutination, (two specimens two weeks apart) and is prepared to differentiate the species both by cultural and guinea pig inoculation. Additional tests are the anti-human globulin (Coombs) test (AHG) and the complement fixation test (CFT). The agglutinating antibodies are to be found in the IgM fraction of gamma globulin and the antibodies which give the positive AHG and CFT results in the IgG fraction. As the acute phase passes and the so-called chronic brucellosis develops the SAT tends to fall in titer and may even become negative while the AHG and CFT remain positive.^{1,3}

The standard agglutination is the venerable work horse of the laboratory. Properly performed, it will yield titers of 1:320 or more in 90% of the patients. The higher the titer, the more likely the blood cultures will be positive. The blood culture clinches the diagnosis. An agglutination under 1:100 is rarely indicative of active disease. Agglutinins may be demonstrated months or years after recovery from active disease, but usually the agglutination titer falls with the years and occasionally may disappear altogether. Retrospectively, the agglutination test is of little value. The brucellin skin test, like the tuberculin reaction or Mantoux, remains positive throughout the years. Like the tuberculin reaction it indicates past, and not necessarily active, disease. The nucleoprotein fraction brucellergen (purified protein fraction) yields a delayed reaction, reaching its maximum in 24-48 hours. The carbohydrate fraction of *Brucella* results in immediate cutaneous reaction.² Brucellergen antigen is available commercially.

TREATMENT

Rest is important, particularly during the acute phase, as well as during remissions. Strain 19 antiserum has no place in prevention or treatment in man.¹⁸ Tetracycline and its cousin preparations are most satisfactory in doses of 500 mgm every 6 hours for 3 weeks. In severe cases, particularly in *Br. suis* infections, FAO-WHO recommends the addition of dihydrostreptomycin 1 to 2 gm daily for 10-14 days. Chloramphenicol is of no recognized value but erythromycin-tetracycline is considered a good combination.

In severe toxic states ACTH or cortisone may be indicated. These states are of the nature of a Herxheimer reaction with hypersensitivity due to

released endotoxin and most often appears after the tetracycline therapy.

EPIZOOTIOLOGY

The spread of bovine brucellosis is by unrestricted contact of infected with susceptible animals. Rapid spread and storms of abortions characterize the introduction of the infection into a "clean" herd. Infected cattle develop a positive blood serum agglutination reaction and a bacteremia. Abortion is immediately preceded by the positive blood serum agglutination reaction. Upon abortion, the organism is shed not only via uterine discharges but also in milk.

The bacteria are found in the uterus during pregnancy and involution, and occasionally in the nongravid uterus. This is of primary concern to human practice, since exposure of hunters and slaughter house employees is most intense when the infected uterus is accidentally opened. Handling the blood and other tissues and organs should not be of contagious importance.

Ingestion of infected fetuses, membranes, and uterine discharges is the natural means of transmission among animals. Venereal transmission by infected bulls is uncommon, although the organism is shed in the semen. The dog, man, and other mechanical vectors may act as a means of spreading the infection.

DIAGNOSIS

Bacteriologic and serologic examination is the basis of diagnosis. The most convenient sources of pure culture are the stomach and lungs of aborted fetuses. The placenta is another source, but is more frequently affected with contaminants.

The most reliable methods of diagnosis involve tube and plate blood serum agglutination. Agglutination at serum dilutions of 1:100 or above for non-vaccinates and of 1:200 for vaccinates (calf herd) is considered positive for brucellosis.

Two screening procedures are valuable adjuncts to diagnosis:

- a) Milk ring test, used to locate infected dairy herds. Milk samples are collected and identified from each herd. Positive milk ring tests indicate whole herd testing of the farm.
- b) Market cattle test, applied to beef cattle, where a positive serum agglutination reaction indicates whole herd testing at the farm of origin.¹⁹

Brucellosis-free areas are achieved and maintained by a system combining the use of the milk ring test on all dairy herds and the market cattle testing program on all non-dairy or beef herds.

CONTROL

There has been no effective, practical means of treating bovine brucellosis. Control and prevention is the only guard. In recent years, the use of strain 19 Br. abortus vaccine has been discouraged since induced resistance is not complete and, more important, false positive reactors often result. The 45/20 strain vaccine (which does not produce false titers) is not in use in our state.

Testing and elimination (slaughter) of reactors is gradually leading the nation and this state to eventual eradication. Hawaii is presently "modi-

fied-certified" in classification (USDA) meaning that less than 5% of the herds and less than 1% of the total cattle population are reactors.²⁰

ACKNOWLEDGMENT

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During any week all blatant errors will be committed on patients of the same physician.

The more irascible the surgeon the greater the chance that his biopsy specimen will be lost.

Blood samples drawn with great difficulty or from very important patients invariably will be dropped.

ROY N. BARNETT, M.D.

*You'll be able to use diuretics more intelligently
if you understand how and where they act.*

A Rational Approach to Diuretic Therapy: A Review for Physicians

KENNETH D. GARDNER, JR., M.D., *Honolulu*

● *Diuretics are natriuretic agents. Their effectiveness in removing excess amounts of sodium and water from the body depends on the delivery of adequate amounts of sodium to the kidney and to the segment of the tubule at which a given agent acts to inhibit sodium reabsorption. In general the more proximal the site of action, the more effective a given diuretic can be. Diuretics which act at different levels along the nephron may reasonably be expected to potentiate each other (Table 1). Their concomitant administration constitutes appropriate combined therapy. The simultaneous administration of two agents which act at the same level in the nephron has no rational physiological basis and should be avoided.*

EACH DAY the average American ingests five to fifteen grams of sodium chloride.¹ To remain in balance, he must excrete a like amount of salt. In health he does so without difficulty, with his kidneys assuming the major responsibility for sodium excretion. When disease occurs, however, and especially if the heart, kidney, or liver is involved, the renal excretion of sodium may fall and a positive sodium balance ensue. With time and an unrestricted access to water, edema must ultimately develop.

It is to treat this edema that diuretic drugs have been devised. Diuretics are natriuretic agents. They act to produce a negative balance of sodium by increasing the excretion of salt by the kidney. They afford an empirical approach to the management of patients suffering from the retention of salt and water. Their use is indicated when the simple expedient of reducing sodium intake is no longer effective in producing a negative sodium balance.

The rational application of diuretic therapy in the treatment of edema requires an understanding

of the intrarenal mechanisms by which the kidney normally handles salt and water. These mechanisms will be reviewed, and against the background of this resumé, the use and effects of selected diuretics will be discussed.

THE RENAL HANDLING OF SALT AND WATER

Daily 180 liters of glomerular filtrate are formed in the kidneys of normal man.¹ This filtrate contains a total of three and one-half pounds of salt, or approximately eight grams per liter. If five to fifteen grams of sodium chloride are excreted each day, [it follows that] most of the sodium which enters the renal tubules must be reabsorbed. [The technique of] nephron micropuncture has yielded direct evidence that some 80 percent of filtered sodium is reabsorbed actively, that is, against its electrochemical gradient, in the proximal convoluted tubule.² Water follows passively down the osmotic gradient which is thereby established across the tubular wall. The net result of the outward movement of water and solute is a reduction in volume but no change in osmolality of the glomerular filtrate as it flows through the proximal convoluted tubule.

Along the descending limb of Henle's loop, intratubular contents probably continue to lose water but gain sodium from the hypertonic medullary interstitium. Neither of these events currently is considered significant in establishing urinary composition or concentration. Around the bend, however, in the ascending limb of the loop, fluid in the tubule encounters an epithelium whose properties are significantly different from those of the more proximal nephron. Specifically, the permeability of this segment of the tubule to water is low, while its capacity to actively transport sodium is high. The ascending limb, therefore, has the capacity to, first, significantly reduce the osmolality of fluid in its lumen and, second, increase the osmolality of fluid in the medullary interstitium by adding sodium but not water to it.

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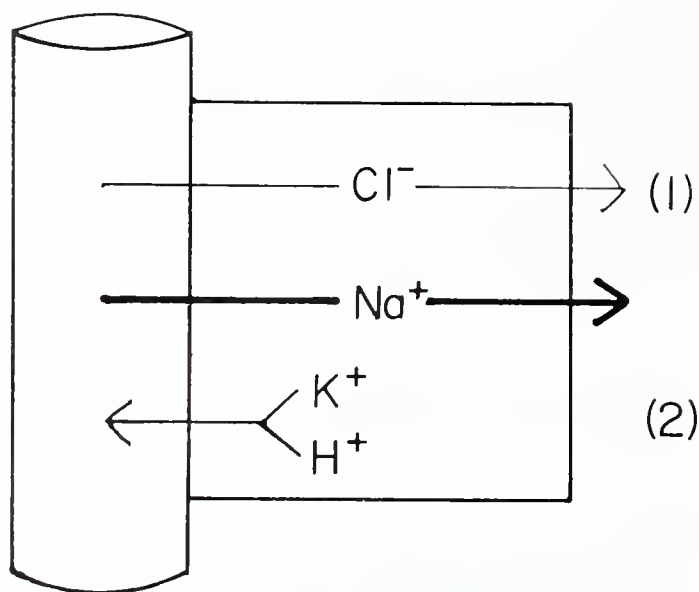


FIG. 1.—Diagrammatic representation of sodium re-absorptive mechanism in the kidney. Active sodium re-absorption may be accompanied (1) by passive chloride reabsorption down an electrochemical gradient or (2) by an exchange of sodium for hydrogen or potassium ions.

Fluid which ultimately enters the distal nephron is dilute and relatively poor in sodium. Along this segment it encounters epithelium with a third set of distinctive characteristics. Here the cell wall can vary its permeability to water in response to vasopressin and not only can transport sodium outwardly against its electrochemical gradient but also can “exchange” sodium ions for either potassium or hydrogen ions (Fig. 1).

When both the sodium exchange and sodium reabsorptive mechanisms in the kidney are maximally effective, the final urine may contain as little as one milliequivalent of sodium per liter. Such is the magnitude of work performed by these mechanisms that a diuretic capable of interfering

maximally with them could force the excretion of all osmotically active sodium in the body in six to seven hours. Fortunately no drug with such potency has yet been devised.

DIURETIC AGENTS

A wide variety of diuretic agents are available to the physician. They act at various levels along the nephron and with varying degrees of effectiveness. In general the nearer the glomerulus its site of action, the more profuse a diuresis any given diuretic may produce. Since diuretics are natriuretic agents, their effectiveness also requires that a significant amount of sodium reach the segment of the nephron along which the diuretic acts. The consideration of commonly employed diuretics in the sequence in which they act along the renal tubule has practical as well as didactic value (Fig. 2).

Osmotic diuretics

Any solute which is filtered at the glomerulus and maintains a concentration which is higher inside than outside the nephron can act as an osmotic diuretic. This class of diuretic agents is well exemplified by mannitol, a hexahydric alcohol whose use is advocated in the treatment of long-acting barbiturate intoxication and in the prophylaxis of the oliguric renal failure associated with acute tubular necrosis.³ Mannitol adds non-reabsorbable solute to the glomerular filtrate. It acts to hold water in the nephron by reducing the osmotic gradient across the tubular wall. Its effect quantitatively is greatest in the proximal convoluted tubule, where the largest volume of water is normally reabsorbed. Less reabsorption of water means greater volume in the tubule and greater volume

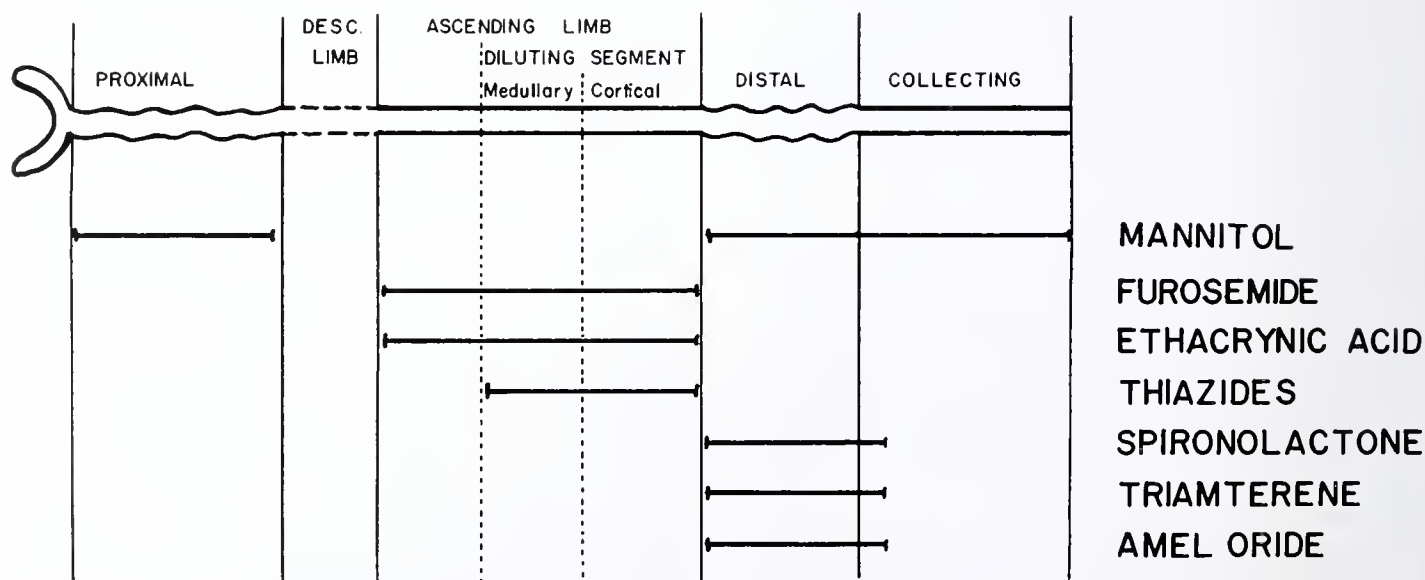


FIG. 2.—Schematic representation of the sites at which selected diuretic agents act therapeutically to impede sodium reabsorption along a mammalian nephron.

means a faster rate of flow since the distensibility of the tubule is limited. In this manner, mannitol causes the delivery of more filtrate to the distal nephron, where the increased volume and flow rate again give tubular cells less opportunity to modify the original glomerular filtrate. The result is the ultimate excretion of a larger volume of solute (sodium)-enriched urine. It is the greater rate of urine flow which causes the excretion of more barbiturate per unit time and presumptively prevents intratubular sludging in acute tubular necrosis.

Mannitol has a second, systemic effect which may contribute to its effectiveness in oliguric renal failure. It increases blood volume and thereby can correct hypovolemic shock and increase glomerular filtration. In this regard it is no more effective than other plasma expanders and is less effective than whole blood. Mannitol therapy is a hazardous procedure in inexperienced hands, particularly in the presence of renal failure. If an intravenous infusion of 25 grams of a 20% solution into the oliguric patient does not produce a prompt increase in the rate of urine flow, the further administration of mannitol is contraindicated.

Furosemide and ethacrynic acid

Furosemide (Lasix) and ethacrynic acid (Edecrin) share a common site of action along the nephron.⁴ Both agents impair the ability of the renal medulla to establish and maintain its usual level of hyperosmolality. They are thought to interfere with the transport of sodium out of the ascending limb of Henle's loop. They cause the delivery of fluid which is relatively rich in sodium to the early distal tubule. The diuresis which results from their use is likely the consequence of this increased solute load to the distal nephron and to the impaired ability of the kidney to reabsorb water from its collecting tubules by virtue of the reduced osmolality in its medullary interstitium.

Both furosemide and ethacrynic acid can be given orally or intravenously. Unlike mercurial diuretics, they act in the presence of both systemic alkalosis and acidosis. Their clinical potency is equivalent to the mercurials. Gradually they are replacing mercurial diuretics in the physicians' armamentarium, and for this reason mercurial diuretics are not discussed further here. Furosemide and ethacrynic acid can cause the excretion of up to 30% of the glomerular filtrate—equivalent in man to a daily urine volume of sixty liters. By virtue of their potency, these agents are best used for the treatment of refractory edema or in which a prompt, voluminous diuresis may be lifesaving. The fact that an occasional patient may have an overwhelming response to the usual

therapeutic dose of these drugs makes their indiscriminate use in the routine treatment of non-emergent edema unwise.

Thiazide diuretics

While a wide variety of thiazide diuretics are available to the physician, they offer in truth little among themselves to choose from. The physician is well advised to select one or two drugs from this class of diuretics and forego use of the remainder. Thiazides are orally administered agents. They cause the excretion of relatively more water than sodium⁵. As a consequence they are thought to act along that segment of the ascending limb of Henle's loop where intraluminal fluid is made hyposmotic to plasma—the late ascending limb. Thiazides also depress potassium excretion and enhance sodium excretion in potassium-loaded dogs, an experimental preparation in which the exchange of sodium for potassium along the distal nephron is maximal. This evidence suggests that they act in the distal tubule as well.

The effects of thiazide diuretics can be potentiated by either furosemide or ethacrynic acid, but the contrary does not hold true. No thiazide potentiates the effect of furosemide or ethacrynic acid. From this observation it has been concluded that thiazides share their site of action with furosemide and ethacrynic acid but that the latter agents are not limited in their effect to that site along the ascending limb where thiazides act.

Of all diuretics, thiazides probably enjoy the widest clinical usage. Of the diuretics under discussion here, they probably are the safest. They are the drugs of choice in previously untreated and nonemergency cases of edema.

Spirolactone, triamterene, and amiloride

Spirolactone (Aldactone), triamterene (Dyrenium) and amiloride (Colectril) act in the distal nephron.⁶ When administered alone, they are relatively ineffective diuretics.

Spirolactone is an aldosterone antagonist. It acts to inhibit the action of that hormone on the sodium-potassium exchange mechanism in the distal tubule. The prime indication for its use lies in situations in which aldosterone activity is high and in which other diuretics used alone have failed to increase the urinary excretion of sodium.

Triamterene initially was thought to be simply another aldosterone antagonist. Unlike spiro-lactone, however, it acts in the absence as well as in the presence of aldosterone. It does not affect the sodium-potassium ratio in saliva, and its effectiveness is enhanced by the concomitant administration of spiro-lactone. For these reasons tri-

amterene is thought to act in some fashion other than by aldosterone antagonism. Its effect on urinary composition, however, is similar. Clinically amiloride differs from triamterene only in that it is more potent.

Combined therapy

Diuretics which act at different levels of the nephron generally potentiate each other when administered concomitantly and their use together constitutes appropriate combined therapy (Table 1). In contrast it is inappropriate to use concurrently two or more diuretics which act along the same segment of the renal tubule.

TABLE 1.—*Principle sites of therapeutic action for specified diuretics.*

Proximal convoluted tubule
Mannitol
Loop of Henle
Furosemide (<i>Lasix</i>)
Ethacrynic acid (<i>Edecrin</i>)
Late loop and/or early distal tubule
Thiazides
Distal convoluted tubule and ? collecting duct
Spironolactone (<i>Aldactone</i>)
Triamterene (<i>Dyrenium</i>)
Amelioride (<i>Colectril</i>)

SIDE EFFECTS OF DIURETIC THERAPY

An understanding of the possible complications of diuretic therapy also is facilitated by a working knowledge of how and where in the renal tubule these agents act. Their side effects are numerous⁷ and include the following:

Hyponatremia

Diuretics may cause a reduction in the normal ratio of sodium to water in the plasma by depleting the body of sodium, since they are natriuretic agents. The patient suffering from sodium depletion will exhibit, in contrast to the overhydrated subject, weight loss, postural hypotension, worsening renal function, and possibly even shock. Sodium chloride replacement is the appropriate treatment for this condition.

Hypokalemia

Diuretic therapy is probably the most common cause of hypokalemia in clinical practice today. Potassium depletion is thought to occur as a consequence of an increased delivery of sodium to the distal nephron under circumstances in which aldosterone secretion is high and the activity of the sodium-potassium exchange mechanism is great. Sodium leaves the tubule and returns to the body while potassium is excreted in its place. Appropriate therapy is (a) stop the diuretic; (b)

administer potassium replacement, preferably in the form of KCl cherry elixir; or (c) administer either spironolactone or triamterene while watching closely for evidence of developing hyperkalemia.

Miscellaneous side-effects

A number of other less frequently encountered side effects have been described in association with diuretic therapy. Carbohydrate tolerance may worsen in pre-diabetics and diabetics, particularly with the administration of thiazides. Its cause is unknown but this effect has not been described in normal subjects. A reduction in the renal clearance of urates may accompany diuretic therapy and lead to hyperuricemia and clinical gout. Uricosuric drugs or a xanthine-oxidase inhibitor are effective in reversing this complication. Dehydration may lead to hypovolemia, and diuretics have been reported to cause pancreatitis and myopia in man.

In routine practice the patient who is hospitalized for the treatment of edema should have baseline measurements and then be followed with frequent observations of *weight* for evidence of volume depletion; *serum sodium* for evidence of sodium depletion; *serum potassium* for evidence of hypo- or hyperkalemia; *blood glucose* for evidence of hyperglycemia; *serum uric acid* for evidence of hyperuricemia; and *serum creatinine* for evidence of worsening renal function, a setting in which diuretic therapy may become progressively less effective due to the diminishing filtration of sodium.

In such a patient the effectiveness of the diuretic regimen can be assessed by sequential measurements of urinary electrolytes. A natriuretic response indicates a successful regimen. A kaliuretic response may indicate the need for aldosterone antagonism. The failure of any response should suggest the possibility that poor glomerular filtration and/or enhanced proximal sodium reabsorption are prohibiting an adequate amount of sodium from reaching the segment of the renal tubules at which the administered diuretic is acting.

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Yeast septicemia is a rare and serious complication of cardiac surgery in which early diagnosis is vital but difficult.

Candida Parapsilosis Endocarditis Following Heart Surgery: Case Report

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● *A 29-year-old woman who died four weeks after mitral and tricuspid valve surgery was found at autopsy to have Candida endocarditis with pulmonary and cerebral mycotic embolism. The difficulty in diagnosing this complication and the significance of candidemia following heart surgery are emphasized.*

PRIOR to the era of cardiac surgery, Candida endocarditis was considered to be a rare entity, encountered mainly in heroin addicts and in debilitated patients who had received prolonged antibiotic therapy.¹ Since Koelle and Pastor reported the first case of endocarditis due to Candida albicans following aortic valvulotomy in 1956,² an increasing number of cases following heart surgery have been reported. To date, a total of at least twenty-three cases of endocarditis, due to various Candida species complicating heart surgery, have been recorded in the English medical literature.³ This represents a significant rise in incidence, corresponding with the increasing practice of cardiac surgery. It forewarns us of a definite hazard to patients subjected to cardiac surgery.

Candida endocarditis carries an extremely high mortality rate. Of 52 cases reported, including those associated with heart surgery, only six have survived. Kay *et al* reported a patient cured by surgical excision of the nidus of infection along the edge of the valve after amphotericin B had failed to control the infection.⁵ Later, they reported another two patients successfully treated by surgical excision combined with amphotericin

therapy.⁴ Kroetz *et al* reported the successful treatment with amphotericin B alone⁶ of a patient with Candida endocarditis not associated with heart surgery. Hence, early diagnosis with prompt and vigorous treatment may be life-saving in such cases. On the other hand, the infection may be masked following heart surgery and a fulminating course with fatal outcome may result in a short period of time, as illustrated in the following case.

CASE REPORT

A 29-year-old woman who had had acute rheumatic fever at the age of five developed symptoms of cardiac decompensation when she was 18. She was first admitted to the hospital because of congestive heart failure five years ago, at age 24, at which time she was found to have mitral stenosis. Mitral commissurotomy was then performed.

In the following 5 years, she was maintained on digitalis and diuretics and had had some improvement in her exercise tolerance. She began to deteriorate clinically about four months prior to her last admission. At the time of admission, her heart failure had become intractable.

Physical examination showed evidence of severe congestive heart failure, tricuspid and mitral insufficiency, and gross cardiomegaly. Her heart failure was controlled in the hospital and cardiac catheterization was done. This showed marked tricuspid insufficiency. The pulmonary artery pressure was 115 mm of Hg. Angiography demonstrated severe mitral insufficiency and slight aortic regurgitation. Her cardiac index was 1.55 l/min/m².

Cardiac surgery was performed under extremely unfavorable conditions. Mitral valve replacement

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with the Kay-Shiley prosthesis and tricuspid anuloplasty were done under cardiopulmonary bypass. The patient tolerated the procedure surprisingly well. Her initial postoperative course was complicated by complete heart block which responded to pacing with an implanted pacemaker. The pacemaker was discontinued after a few days when her rhythm changed to atrial fibrillation with a complete left bundle branch block. She also had excessive amounts of tracheobronchial secretions, a low-grade fever, and radiological evidence of pneumonitis in the lower lobe of the right lung. Sputum cultures showed mixed growths.

Ampicillin and then kanamycin therapy were instituted. She had some dependent edema but no evidence of congestive heart failure. A tricuspid pansystolic murmur was still present. Her serum bilirubin level initially was elevated and her serum albumin level was in the range of 2.5 to 3 gm%.

On the 14th post-operative day the intravenous lines were withdrawn. Shortly afterwards she developed an episode of tachycardia; she had a spiking fever and complained of chills and lowback pain. This was thought to be due to multiple small pulmonary emboli, probably arising from the inferior vena cava as a result of the indwelling catheters. A blood culture at this time showed growth of a *Candida* species. Her fever subsided the following day and antibiotics were later discontinued. Earlier she had been placed on coumadin.

Her clinical picture in the subsequent two weeks was marked by intermittent low-grade fever, evidence of tricuspid insufficiency with venous congestion, and increasing tiredness and weakness. The gradual deterioration, looked at clinically, seemed to be out of proportion to the degree of venous congestion.

Her liver function tests had slowly returned to near-normal and her chest x-ray also showed resolution of the pneumonitis. The white cell counts were in the range of 10,000 to 12,000 per cu mm with about 80% polymorphs. Two blood cultures were again obtained.

On the 27th post-operative day, she was found to be very cyanotic and weak. Her venous congestion had become worse. She was hallucinating, and then suddenly lapsed into coma. This was followed by cardiac arrest. Resuscitation was successful but the patient remained semi-comatose.

The next day, an emergency insertion of a Kay-Shiley prosthesis into the tricuspid valve was done under cardiopulmonary bypass. During the operation the patient developed generalized bleeding and shortly after the operation she expired.

The two blood cultures sent prior to the terminal episode again yielded a *Candida* species.

The heart weighed 470 gm and showed biventricular hypertrophy. Both the mitral and the tricuspid valve prostheses were in place except for a 4-mm window between the annulus fibrosus of the mitral valve and the outer posterior margin of the prosthesis. This was thought to be due to cutting through or loosening of a suture at the base of the Kay-Shiley valve. Rimming the free margin of the mitral valve prosthesis, which otherwise showed almost complete endothelialization, were multiple friable tan to pale yellow vegetations, the largest measuring 8 mm in diameter. These vegetations were present on both the atrial and ventricular surfaces of the prosthesis and extended to involve part of the base and the small atrioventricular aperture mentioned (Fig. 1).

Culture of the vegetations on Sabouraud's medium yielded a pure culture of a *Candida* species. Subculture on corn-meal agar did not produce chlamydo-spores; carbohydrate fermentation tests were also negative. The *Candida* was felt to be of a species other than *C. albicans*. Special tests performed at the Laboratory of Hawaii's Department of Health showed the organism involved to be *Candida parapsilosis*.

Microscopic examination of the vegetations revealed large numbers of hyphal and blastospore forms in the fibrin clots (Fig. 2).

In the lungs, multiple mycotic emboli obstructing small and medium-sized vessels were associated with acute hemorrhagic infarcts measuring up to 3 cm (Fig. 3). The main superior branch of the left pulmonary artery was more than three-quarters occluded by a large thrombus which showed partial peripheral organization. No fungus was seen in this thrombus which, in view of its greater degree of organization, must have oc-

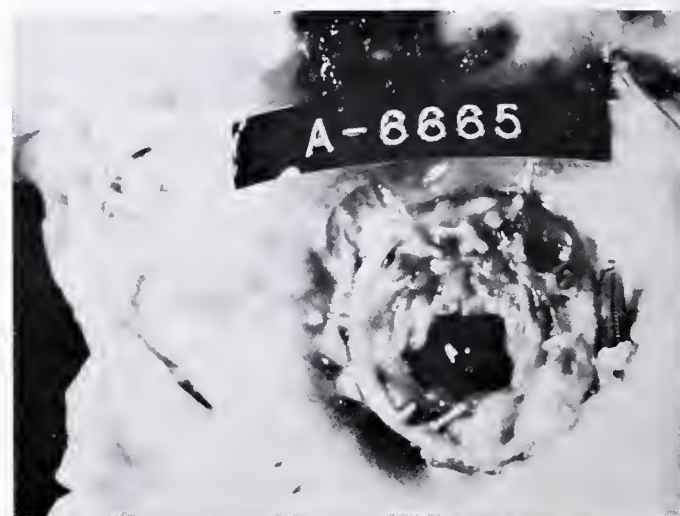


FIG. 1.—Atrial aspect of the mitral valve prosthesis showing medium-sized vegetations rimming its free margin and extending to the base posteriorly.

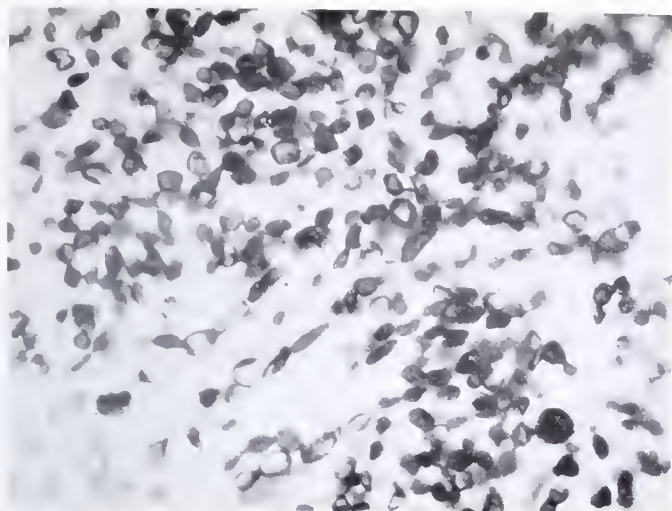


FIG. 2.—Vegetation on mitral valve prosthesis. Both hyphal and blastospore forms of *Candida* are seen. (Gomori's methenamine-silver nitrate, $\times 840$.)

curred earlier in the clinical course.

There was severe acute and chronic centrilobular congestion in the liver, which weighed 1520 gm. A microscopic area of ischemic necrosis was present in the medulla of the right kidney, but no fungus was demonstrated either in the blood vessels or parenchyma of this organ.

In the brain, small branches of the left middle cerebral artery were occluded by multiple mycotic emboli (Fig. 4). These were associated with extensive acute (less than 24 hours) infarction in the left insular, parietal, and occipital cortical grey matter.

DISCUSSION

Merchant *et al* pointed out that “*Candida* endocarditis frequently appeared to be the result of initial implantation of the organisms on the heart valve with subsequent hematogenous dissemination.

FIG. 3.—A small artery in the lung occluded by mycotic embolus. Tiny dark dots are the blastospores which are also present in the arterial wall and perivascular tissue. (Hematoxylin & eosin, $\times 84$.)

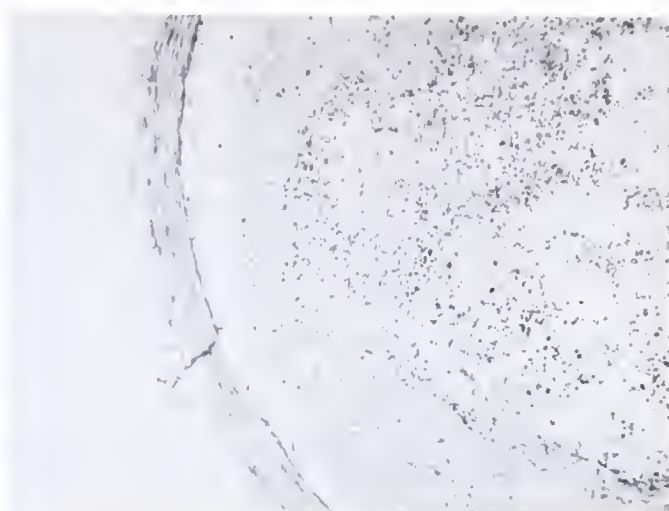
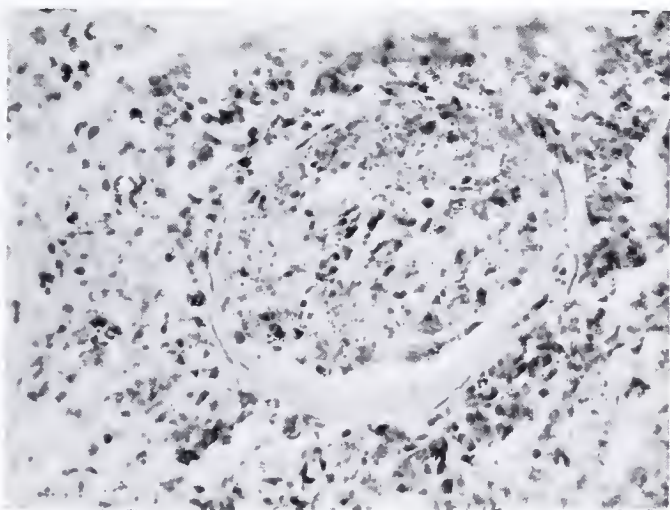


FIG. 4.—A mycotic embolus in a branch of the left middle cerebral artery. (Gomori's methenamine-silver nitrate, $\times 84$.)

tion, rather than a manifestation of the already widely disseminated fungal infection.”⁷ The portal of entry of the fungus in narcotic addicts is through the intravenous route from contaminated needles and syringes.

In patients subjected to cardiac surgery, there are many potential sources of infection. Identical fungal growths have been isolated from oxygen pumps⁸ and intravenous infusion sites⁹ in patients with *Candida* endocarditis following heart surgery. Contaminated prostheses or homografts, suture materials, intravenous fluids, or wounds can all lead to deposition of the organisms on the heart valves. Such infection may be enhanced by predisposing factors as prolonged antibiotic or corticosteroid therapy.^{1, 10}

The characteristic and sometimes diagnostic feature of *Candida* endocarditis is embolization of the larger arteries, because of the large size and fragility of the mycotic vegetations.⁷ Climec *et al* described a case in which the diagnosis was confirmed by the finding of mycelium in a femoral embolus.¹¹ This complication, however, is not invariable and may not be evident early in the clinical course, as in our patient. The usual presenting features of *Candida* endocarditis are similar to bacterial endocarditis and can be very subtle in a post-cardiac-surgery setting. Blood cultures, however, are usually positive during life, because of the ease with which the *Candida* can be isolated in ordinary culture media.⁷

The significance of candidemia has been studied by Ellis *et al*.¹² Of twelve patients with more than one positive blood culture, only four were found to have disseminated *Candida* infection at autopsy. Four patients had transient or even prolonged candidemia in the course of a complex clinical situation and survived without therapy. Two patients had candidemia preterminally and no evi-

dence of tissue infection at autopsy. Another two were treated for candidiasis, one of whom died but had no evidence of disseminated candidiasis at autopsy.

Hence, in over half of the patients, candidemia was not associated with actual tissue infection. In patients subjected to cardiac surgery, however, the risk of deposition of the fungus on the raw surface of the heart, with subsequent infection, is high. Climie *et al* have emphasized that in these patients positive blood cultures must always be considered of potential significance¹¹ and care must be taken in attributing any unsuspected organisms to accidental contamination of blood or culture medium. Retrospectively, candidemia was the only definite sign in our patient that *Candida* endocarditis had set in.

Another important feature in this patient's clinical course was the gradual deterioration of her general condition, starting at the second week when candidemia was found following an episode of fever and chills, associated with low back pain. Ellis *et al* noticed in their four patients with disseminated candidiasis that deterioration of the clinical course at the time of candidemia was the significant sign of actual tissue infection, in contrast to transient dissemination.

The decision of when to institute therapy in a patient with candidemia is always a difficult one because the current drug of choice, amphotericin B, has many toxic side effects which can complicate the picture in an already severely ill patient. Ellis *et al* advocate immediate institution of amphotericin therapy if, at the time of candidemia, the patient's clinical course is deteriorating. In cases where candidemia is not accompanied by worsening of the clinical picture, antibiotics, corticosteroids, and intravenous catheters should be discontinued to remove the potential sources

of bloodstream contamination and reculturing of blood obtained.¹²

This approach to the problem of candidemia is a useful guide also in the management of post-cardiac surgery patients when associated signs of *Candida* endocarditis are not present. Unfortunately, our patient succumbed before the result of the second blood culture was known.

Because of the difficulty in making a definite diagnosis at the early stage and the risk of a fulminating course with fatal embolic complication, it is felt that perhaps post-cardiac surgery patients should be immediately treated once candidemia is detected. Furthermore, surgical intervention to eradicate the foci of infection in the heart valve may be necessary in cases that do not respond to antifungal therapy, or when its toxicity precludes its prolonged use.

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Haber's Hypothesis

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MERYL H. HABER, M.D.



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Beef Broth	22	Vegetable	68
Consommé	29	Tomato	69
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Chicken Gumbo	48	Cream of Chicken	76
Chicken Noodle	54	Cream of Mushroom	115
Cream of Potato	58	Green Pea	116
Chicken Vegetable	60	Cream of Shrimp (Frozen)	132
Vegetable Beef	66	Bean with Bacon	133

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The President's Page



As I attend meetings such as the AMA and the American College of Surgeons and try to read the incredible amount of material which gets into your President's folder at the HMA, I am convinced that physicians working through their established committees and organizations are influencing legislation and the activities of government. We must continue to exert all the influence we can to see that medical care is available to all but also that patients can have some choice in the type of care available to them. It was good to hear Secretary Richardson in Chicago indicate he favors retention of what is good in our system and not trying to replace it with a single national health scheme. A physician from Quebec, Canada gave a vivid description of what can happen if government and physicians do not communicate.

Unfortunately our professional liability insurance problem is still unsolved. The hoped for accord between the AMA and the CMA Insurance Company is stalled. Top level meetings between insurance carriers and HEW have not occurred yet. It is hoped that the higher rates locally will attract new companies to Hawaii.

Your Legislative Committee under Dr. Richard K. C. Lee with the constant help of your commissioner for Legislation, George Goto, is hard at work getting ready for the coming session of the legislature. They will be calling on various members for help when necessary. It is the least any of us can do considering the hours they and their committee spend working for the good of our patients and all of us. ■

John J. Looney

Who's Liable for Transfusion Hepatitis?

Both hospitals and blood banks are "strictly liable" to patients who contract transfusion-induced hepatitis, according to a recent ruling by the Illinois State Supreme Court.

This means that victims of transfusion hepatitis need not prove negligence in order to recover damages for such an occurrence. All they need to prove is that they acquired hepatitis as a result of the transfusion.

This decision runs contrary to all previous court decisions on this subject, but lawyers say that its very simplicity makes it likely that it will serve as a precedent for future decisions.

On the face of it—since hepatitis virus cannot be identified in blood and no precaution can insure against its presence there—the decision would seem to be grossly unreasonable and unfair.

What gives it a certain degree of reasonableness is the fact that blood banks and hospitals can, and should, protect themselves with liability insurance against such a contingency—whereas patients cannot.

The doctrine of "strict liability" has been held to be inapplicable when a product is "unavoidably unsafe," so long as a disclaimer or proper warning is given the purchaser. This is one possible way out, though the Illinois court did not see fit to apply it. Such disclaimers are now often printed on the containers of bank blood. Also, the Hawaii Legislature in 1969 passed a law stating that there

should be no implied warranty that blood or plasma for transfusion is free from the virus of hepatitis.

Another way out is to eliminate blood and plasma by law from the category of commodities, making a blood transfusion a service and not a sale.

Still another roadblock for the patient would be the proof that the transfusion did not merely precede the hepatitis, but caused it; this would surely be difficult in most cases and impossible in many.

Yet another protection for the potential defendants is that knowledge and assumption of the risk—which would not be difficult to achieve with intelligent patients—would presumably be a bar to recovery of damages.

Probably legal limitation of liability of blood banks and hospitals—in the absence of negligence or willful misconduct—is the safest protection for all concerned. Liability insurance against this unhappy but still unpreventable misfortune would unreasonably increase the cost of medical care and hospitalization.

Attorneys for blood banks and hospitals are actively studying the problem at both national and local levels. Some solutions must be found—and meantime, transfusions cannot be withheld just because there is now a grave financial risk in addition to the already known medical one. ■

Crocks and Coronaries

Woman, although biologically the stronger sex, is also known to be the more neurotic, being peculiarly prone to such psychosomatic illnesses as tension headaches, migraine, arthritis, and a diverse assortment of other bodily aches and pains. She has consequently become the devoted user of a plethora of analgesic preparations thoughtfully provided by an obliging pharmaceutical industry. Most of these preparations contain aspirin, a drug known to impair hemostasis by inhibiting platelet aggregation and prolonging the prothrombin time. In short, aspirin is an anticoagulant as well as an analgesic.

A simple cause-and-effect relationship is seen with the chronic analgesic abuser, in whom gastrointestinal bleeding, ulcers, and anemia are common. More subtle effects may be seen following aspirin ingestion during pregnancy. Platelet dysfunction and occasional bleeding episodes were found in neonates born of mothers who had taken aspirin during the last week of pregnancy. (*JAMA*, September 12, 1970.)

However, every cloud has a silver lining. Perhaps our crotchety counterpart does derive some long-term benefit from her prolonged consumption of analgesics? The decreased incidence of coronary thrombosis in women may be due, in part, to the sustained anticoagulant effect provided by the continuous consumption of aspirin products.

Hospital Unisex

Cultural psychologists express concern about the increasing loss of sexual identity seen in modern American society. Men and women now look alike, dress alike, and act alike. Walking a few steps behind a modern couple, one may be unable to tell which is which. The two sexes are blending into one unisex.

First originated by the fashion industry, unisex now pervades all parts of the social structure, including, it would appear, our local hospitals. The vanguard of the new sexual revolution in our hospitals appeared about three years ago when some of the house staff were seen sporting long, flowing, shoulder-length hair. In subsequent years, the number of Prince Valiants and the length of their locks has increased sharply, despite the ready

availability of barber shops in the vicinity.

The final blow was struck a few months ago when the nursing staff were permitted to wear trousers on duty. We understand that the persistent rumbling heard to the East is not volcanic activity on the Big Island but Florence Nightingale turning over in her grave.

Sleeping-Late Syndrome

Many people find that after sleeping in late in the mornings they feel worse than usual when they eventually get up. They seem to suffer from a "worn-out" syndrome comprising lassitude, impaired concentration, fuzzy thinking, and difficulty in "getting going" after a long night's sleep. Studies by Globus (*Psychosomatic Medicine*, November-December, 1969) showed that 76% of a group of normal subjects suffered with this syndrome following a night of prolonged sleep (average, 10 hours) which was unrelated to a previous sleep deficit.

Probably optimal sleep duration falls within a narrow time band, impaired performance being associated with too much as well as too little rest. Possibly, that hung-over feeling on Sunday morning is not all due to Saturday night's party, but simply part of the sleeping-late syndrome.

Telephone Talk

An instructive article by pediatrician, Charles Stamey, (*Medical Insight*, September, 1970) on the symbiotic relation between the physician and his telephone. A few typical extracts:

"Its incessant demanding qualities are like the itching that never gets completely scratched; its needs must be met 24 hours a day, 7 days a week." "It is questionable how popular the doctor's traditional golf game would really be if there were a telephone at each hole on the golf course." "The patient must also have the reassurance of knowing that the doctor will return the call. As every doctor knows, there are few true emergencies; but this is not the important factor. The prime concern is when the patient *thinks* it is an emergency. It is not how it really is, but how the patient feels it is, that counts." "The important thing is not what the patient says when the telephone rings, but what he means and what he feels. The call may simply be a source of human contact with

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Hawaii Academy of General Practice

... IN WORKMEN'S COMPENSATION

It has been well over five years since physicians' fees in industrial accident cases were last hammered out after lengthy hearings conducted by the State. Many interested parties participated then. Since that time, the cost of doing business has soared. The State has failed to keep up with the times. By law, fees were supposed to be reviewed at intervals, but the length of these intervals was left up to the Director, Department of Labor and Industrial Relations. Of course, it is in the best interest of the governments, State and City, both of which are major employers, as well as to the interest of insurance carriers and employers in general, that no upward rescheduling of fees be considered—or at least that such a matter be put off indefinitely.

At the time the last hearings were conducted, the Hawaii Medical Association was in the throes of a monumental work in bringing out a Relative Value Fee Study. This was supposed to bring order out of chaos in so far as one procedure being related to another was concerned, primarily in the field of surgery. It was designed to help physicians as well as insurance carriers and third parties. Accompanying it was the concept of a conversion factor, giving a value to the unit in dollars and thus making the RVS a practical document. Initially, the unit value agreed upon within the profession was to apply to all physicians equally for the most part. However, as the years flew by and the physicians' costs of doing business were escalated by MEDICARE paper work, taxes and salaries, a disunity appeared. Some of the special specialists felt the common denominator of a single conversion factor did them economic harm. Others, particularly the rural GP's and physicians on the neighbor islands, sort of held the line, their office costs perhaps not climbing so rapidly.

For whatever numerous and varied reasons, the fact remains that there now exists a considerable variation in the conversion factors applied to the RVS—anywhere from \$5 to \$9, and up. An office call, with a unit value of 1.0, may draw a charge of \$5 to \$9. Thus, the relativity of the document has been broken up into small segments and again we have chaos. It is no wonder the

third parties are becoming upset, confused, irate, and balky!

Contributing to this confusion in relativity and to the disparity between the fees charged by various physicians, came the Hawaii Medical Service Association with its "usual and customary" fee. HMSA assigned "profiles" not only to each physician, but also to groups of physicians by specialty. The penalty for having a low profile in the case of a participating physician was that he could bill for no more than the 20% that the HMSA schedule permitted him to present to the patient directly. In the case of the "non-par" physician, it was his patient that had to pay the extra out-of-pocket. This scheme permitted HMSA to inflict upon us a system of pegged profiles that were in essence immutable. This made for a practical "differential" between physicians' charges—NOT on the basis of skill, but on the basis of a diploma.

The current dilemma faced by the WCB, as it conducts hearings for new fee rates, is that whether it goes the route of "usual and customary" or of "differential in fee" according to specialty, it will face serious problems. The "open endedness" as profiles are likely to be shifted upwards is one. Another is the likelihood that the employee, who has free choice of physician by law, will be pushing to get the most expensive doctor to care for him, whereas the employer and the insurance carrier will be more likely to seek the cheapest brand of care.

Actually, the law is supposed to be applied fairly and equally to all. The differential in fee inherent in either of the above schemes will permit the law to be applied selectively. This is certainly not fair and may well be unconstitutional. Since it is impossible for the lay public to decide as to the quality of a physician's skill and results and recompense him differentially on that basis alone (one surgeon may take three hours for an operation that another can complete in two, and as well or better!), it becomes apparent that the only proper way for an industrial accident fee schedule to be set up is to determine a fixed fee schedule based on relative values determined by physicians, with a single conversion factor applicable equally to all, with provisions for automatic adjustment depending on parameters such as the cost of living or the cost of doing business.

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University of Hawaii.....

Overseas efforts of the Section of Tropical Medicine and Medical Microbiology have included in the past several months a Vietnam Medical School Program. **Dr. Scott B. Halstead** initiated, at the University of Saigon, work in viral diagnosis, centering on dengue, hemorrhagic fever, and viral encephalitis, two diseases of high morbidity and mortality in infants and children. Other University professors assisting in this on-going program are **Drs. A. R. Diwan, D. R. Nash, and O. A. Bushnell.**

Another extension of activity is aid in establishing a national epidemiology service in Thailand. Through the efforts of **Drs. Halstead and R. S. Desowitz**, with WHO-UNICEF support, a proposed 5-year plan for gathering comprehensive disease information is making progress. It includes a program of in-country training of epidemiology workers as well as sending some of them to the University of Hawaii for post-graduate work.

A WHO-supported project in the Philippines will involve University workers in strengthening

techniques of diagnosis in the Philippine Bureau of Research and Laboratories of the Department of Health.

In the fields of genetics, Associate Professor **Ming-Pi Mi** presented a paper at the meeting of the American Society of Human Genetics at Indianapolis, Oct. 11-14, entitled "Population Study in Dermatoglyphic Traits."

On the clinical side, **Dr. Richard K. Blaisdell's** course for first year students in "history taking" is utilizing the excellent clinical facilities and talents of an able medical staff at Tripler Hospital.

Dr. Stuart M. Brown, Vice-President for Academic Affairs of the University of Hawaii, recently presented to the Medical School a remarkable five-volume work by Adelman on Marcello Malpighi's contributions to the evolution of embryology, published by the Cornell University Press.

P. W. HONG, M.D.

C. S. JUDD, JR., M.D. ■

**HELP THE FIGHT AGAINST EMPHYSEMA
AND OTHER RESPIRATORY DISEASES
BUY CHRISTMAS SEALS**

• This man, a 57-year-old power plant operator of Hawaiian-Korean ancestry, was referred for evaluation of a mediastinal mass lesion discovered on a routine survey roentgenogram of the chest.

• Pertinent past medical history includes diabetes mellitus, arteriosclerotic heart disease, labile hypertension, periodic atrial fibrillation, and questionable thyroid disease.

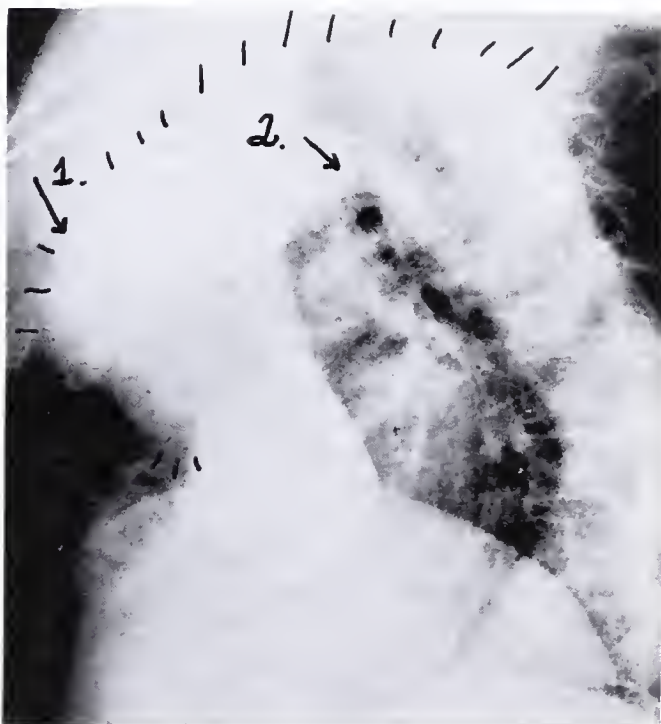
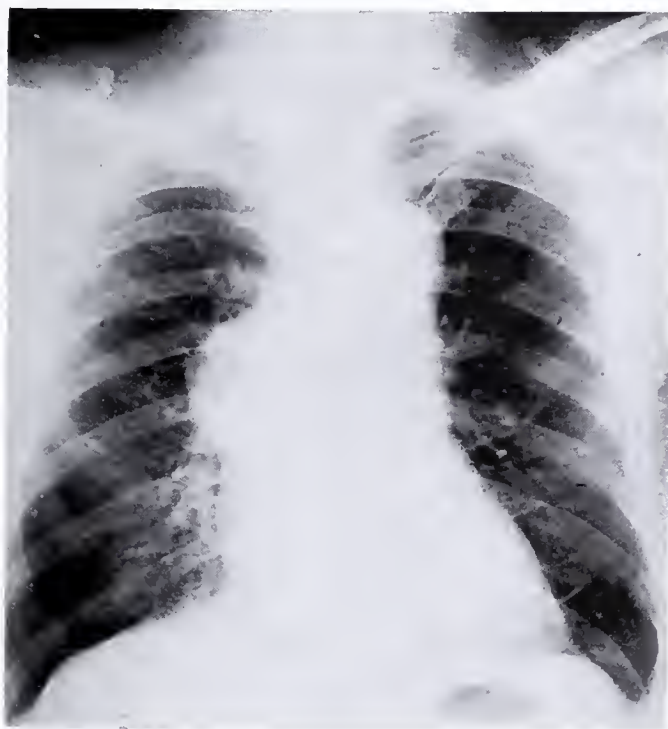
• The patient was a smoker but quit 20 years ago.

• For the past two months he has noted shortness of breath on moderate exertion and minor weight loss.

• Precordial aching and pain in both shoulders have developed in the past three weeks.

• What is your diagnosis?

• Answer is below.



Serial aortography, with the tip of a right brachial artery catheter at the aortic root, revealed a large dissecting aneurysm. The dissection begins just above the right coronary artery and presents as a large substeral bulge at "1" and continues over the entire aortic arch as indicated on the film. The true aortic lumen at "2" is narrowed and compressed by intramural blood within the dissection.

Submitted by the

RADIOLOGICAL SOCIETY OF HAWAII
ROBERT G. RIGLER, M.D. ■

This is the eighty-seventh installment of In Memoriam—Doctors of Hawaii.

Wesley Harrington Ketchum

Wesley Harrington Ketchum was born in 1878. He graduated from the Cleveland-Pulte Medical College in 1904, and following graduation, went into practice in Hopkinsville, Kentucky.

Hopkinsville was the home of the famous Edgar Cayce, who practiced medical diagnosis by clairvoyance. Young Dr. Ketchum had a chance to test his powers when Cayce told the doctor that he was not suffering from appendicitis (although six doctors concurred in that diagnosis and he was scheduled for surgery within a few days) but from a wrenched spine which caused nerve impingement. Cayce recommended osteopathic adjustments, which cured the condition. So impressed was Dr. Ketchum with Cayce's diagnosis that he began a thorough investigation of his work, and soon became convinced of his ability, while in a trance, to diagnose and outline the treatment for the most baffling medical cases.

The Medical Society of Christian County took a very dim view of Dr. Ketchum's increasing involvement with Mr. Cayce, whom they considered a fraud. At a special meeting of the Society, to which Dr. Ketchum was not invited, they decided to send a committee to the state capitol to instigate proceedings to have his license revoked. The doctor was informed of a second meeting of the Society at which the charges against him were to be made public. To this the young doctor went well prepared to defend himself, and he proved a formidable adversary. When it came his turn to speak he quietly explained that all he was doing was investigating Mr. Cayce and his work. He then suggested that six doctors be chosen, each one of whom was to select his most complex case, and then Cayce would diagnose each of the cases with two stenographers present during his trance to transcribe his remarks verbatim.

At this point Dr. Ketchum reached into his pocket and slapped down on the table before him a thousand dollars in new bills, and said, "Now after the diagnoses have been made, and the patients have been examined, if the diagnoses are not absolutely correct, I will turn this money over to any charity you name in Christian County,

deducting, of course, the money paid out for your examinations." There was a stunned silence and then Dr. Ketchum snapped, "Here's my thousand dollars; now either put up or shut up." After another lengthy silence a voice said, "Mister Chairman, I make a motion that the subject be laid on the table."* And that was the last of Dr. Ketchum's troubles with his confreres in the Christian County Medical Society.

Early in 1911 Dr. Ketchum persuaded Cayce, whose business was photography and who had been away in Alabama for about a year, to return to Hopkinsville, where he was to be set up in a photographic studio of his own and where he would also give daily readings as a psychic diagnostician. The enterprise was co-sponsored by Albert Noe, owner of a hotel in Hopkinsville, and Dr. Ketchum, and for the first time Cayce was to receive a fee for his work as a psychic.

The company did a great volume of business and sacks of mail arrived daily requesting readings. Dr. Ketchum was working towards the establishment of a hospital where the patients could come to have the treatments recommended by Cayce carried out, and in order to get the money necessary for such an institution, began to be selective in the cases he presented to Cayce for diagnosis. Mr. Cayce eventually became disturbed by the arrangement, since he had never before accepted money for his readings, and because he had never before turned anyone away who had a genuine problem, and he finally dissolved the partnership. Although this was the end of their work together, this in no way changed Dr. Ketchum's belief in the powers of this remarkable man.

Subsequently, the doctor left Hopkinsville, took a refresher course at Harvard and then went to Hawaii. Arriving in Honolulu in February, 1913, Dr. Ketchum opened an office on Beretania Street. During his years in Hawaii he was a member of the Hawaii Medical Association. He remained in Honolulu until April, 1918, when he left to settle in Palo Alto, California, where he practiced until his retirement.

He was married to Mrs. Kate (De Tuncq) Ketchum.

On November 28, 1968, Dr. Ketchum died in Los Angeles at the age of 90. ■

* From "Edgar Cayce—The Sleeping Prophet" by Jess Stearn.

. . . Telling It Like It Is

I had been a member of HMA for about two years and had been writing this column for about nine months when I first saw an organizational chart listing the committees of HMA. My first reaction has been reinforced since—we have too many committees. Too much overlapping of responsibility. Too many committees that rarely meet, because they have so little need to do so. Too often questions hang fire, waiting for some committee to meet and act. Too much deadwood.

I think I speak not just for myself, but for the average member of HMA when I say I would prefer to have all the superfluous committees trimmed off. It seems rather axiomatic that most committees that are not meeting regularly only stand in the way of real function. There are exceptions, of course—such as a nominating committee, which has a very important function of meeting once a year. I hope this comment does not result in a flurry of meetings, to justify the existence of certain committees. I am even more opposed to useless committee meetings than I am to unnecessary committees.

I'm not going to name any committees this month, but I am going to issue a challenge to every member of each committee which has not met in the last three to six months, to seriously ask himself the following questions: Is my committee really necessary? Wouldn't the function of this committee really be served better by dissolving it, and referring its duties to some other committee which is meeting more often, and can more readily dispose of the occasional problem that comes up in this special field? I invite you to write me a brief letter, with a carbon copy to Dr. Lowrey, giving me your feelings. I will discuss the results of my informal "poll" in a future issue.

Apropos of what I am talking about is the news that the **Medical Practice Act Committee** has been incorporated into the **Legislative Committee**. Hurray—one small step, which strengthens this very important committee. This is its "off-season," of course, but it meets every month or so throughout the year, to be prepared for the great press of activity while the legislature is in session. In its September 3 meeting, this committee discussed some of the anticipated bills for the

forthcoming legislature which will affect the practice of each of us: The Comprehensive Health Planning Group is planning to reintroduce a bill to repeal the one year residence requirement. Other anticipated bills relate to birth control for minors, hospital franchising, the four-year medical school, and many bills on environmental health. There was considerable discussion on the question of whether to hire a legislative counsel, and if so, on what basis—whether on contract or fee-for-service basis. Dr. De Jesus pointed out that lobbying is public relations, and suggested that the money budgeted for both functions be combined, to hire someone really first rate who works in both fields.

The Hawaii Committee on Drug Abuse has been formed by the state, is chaired by Dr. Stewart, who also chairs our Ad Hoc Committee on Drug Abuse, which will obviously be working very closely with the "Hawaii Committee," considering many questions and a vast amount of information. A prime question: Should marijuana be legalized???????

Careers Committee is organizing the Health Careers Council, with the participation of all organizations in the health field, for an expanded Health Careers Day and a year-round program to interest young people, and better people, into all the health fields. HMA is contributing \$2,000.

Chronic Illness and Aging has been successful in getting the theme of the next HMA meeting to be "New Challenges to Chronic Disease," so they have a lot of spadework in helping prepare for our meeting next May. Discussed "intermediate care facility." Do we need one? Patients change status in need for care without a lot of notice. How can utilization review committees keep up with changes of status, and transfers back and forth between institutions?

Water Safety again discussed the problem of sharks. After reading the report that in the last 75 years there have been only 25 unprovoked shark attacks in Hawaii, and only one death, I wonder whether the question really justifies all the to do about it. Drownings, yes—there are several every year. More education is needed, especially among tourists and newcomers, who are involved in most drowning accidents.

Health Manpower received a report that the

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Werner G. Schroffner, M.D.

839 South Beretania Street
Honolulu, Hawaii 96813

INTERNAL MEDICINE

University of Innsbruck, Austria—
1963

Internship—Queen's Hospital,
Honolulu—1964-1965

Residency—Queen's Hospital,
Honolulu—1965-1967

Albany Medical Center & V.A.
Hospital—1967-1968

Albany Medical College—1968-1969



Ernesto A. Orinion, M.D.

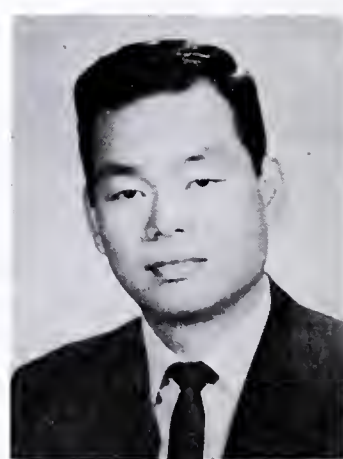
880 Kam Highway
Pearl City, Hawaii 96782

INTERNAL MEDICINE

University of the East,
Ramon Magsaysay Memorial Medical
Center—1964

Internship—Kuakini Hospital—
1964-1965

Residency—Mt. Carmel Mercy
Hospital, Detroit—1965-1968
St. Francis Hospital—1969-1970



Ching Kong Lu, M.D.

45-602 Kam Highway
Kaneohe, Hawaii 96744

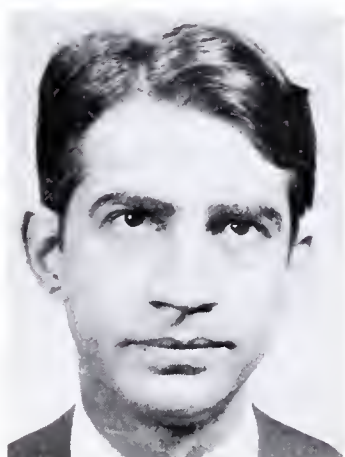
PEDIATRICS

University of Santo Tomas—1959

Internship—Deaconess Hospital,
Milwaukee—1960-1961

Residency—St. Louis City Hospital—
1961-1962

Children's Hospital—1962-1964
St. Joseph Inf., Atlanta, Ga.—
1964-1965



Ijaz Ur Rahman, M.D.

2726 Laniloa Road
Honolulu, Hawaii 96813

**INTERNAL MEDICINE &
CARDIOLOGY**

Nishtar Medical College, Multan,
West Pakistan—1960

Internship—Kuakini Hospital—
1963-1964

Residency—Queen's Medical Center
—1967-1969



John W. Edwards, Jr., M.D.

888 South King Street
Honolulu, Hawaii 96813

UROLOGY

Howard University—1960

Internship—Walter Reed General
Hospital—1960-1961

Residency—Walter Reed General
Hospital—1962-1966



Melvin H. Levin, M.D.

888 South King Street
Honolulu, Hawaii 96813

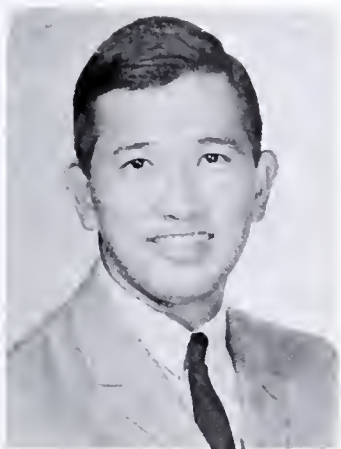
INTERNAL MEDICINE

University of California—1944

Internship—U.S. Naval Hospital,
San Diego—1944-1945

Residency—University of California
Hospital—1946-1947

V. A. Hospital of Los Angeles—
1947-1949



Paul I. Sunahara, M.D.

839 South Beretania Street
Honolulu, Hawaii 96813

DERMATOLOGY

University of Wisconsin—1964
Internship—Oakland Navy Hospital
—1964-1965

Residency—UCLA Hospitals,
Los Angeles—1967-1970



Neal E. Winn, M.D.

1040 South King Street, Suite 312
Honolulu, Hawaii 96814

OBSTETRICS-GYNECOLOGY

McGill University—1963
Internship—U.S. Naval Hospital,
Chelsea, Mass.—1963-1964
Residency—Kapiolani Hospital—
Queen's Medical Center—1967-1970



Danelo R. Canete, M.D.

839 South Beretania Street
Honolulu, Hawaii 96813

CARDIOLOGY

University of Santo Tomas—1960
Internship—Bergen Pines Co.
Hospital, Paramus, N.J.—1962
Residency—Albert Einstein Medical
Center—1963-1964

HAWAII MEDICAL JOURNAL

County Society News

Hawaii

The July 30 meeting was held at the Hilo Hotel with nineteen members present. Guests included: John Keanon, M.D., Project Director, RMP Cancer Chemotherapy Project and his Administrative Assistant; Robert Johnson, M.D., Professor of Surgery and Head of the Department of Oncology, University of Wisconsin School of Medicine; Michihiro Miyanishi, M.D., and five other physicians from Hiroshima (Japan) University School of Medicine; three Registered Nurses from the Hilo Hospital.

Dr. Keanon gave a brief summary of the work he is doing with the Cancer Chemotherapy Project. Dr. Johnson presented a most interesting discussion on the current status of cancer chemotherapy and the encouraging results that are being obtained. He presented some of his thoughts relative to the future of chemotherapy and some of the promising drugs that are being used at the University of Wisconsin.

Dr. Caldwell asked for an expression of the members relative to the desirability of having a 100-bed acute general proprietary hospital in Hilo. The Western Hospital Group, Inc. of California has asked for this ex-

pression from the physicians. After much discussion it was agreed that the Medical Society would take no position on the issue.

* * *

The September 16 meeting was held in conjunction with the Hawaii County Bar Association. Members in attendance were: Drs. Stanley Smith, De Witt Smith, W. Bergin, R. Carvalho, E. Helms, T. Taniguchi, H. Yuen, W. Loo, E. Best, W. Spies, D. Woo, E. Ballerini, Irwin, Caldwell, R. Oda, R. Wiperman and G. Bracher. The following attorneys were present: Messrs. G. Yuda, V. Cook, T. Leuteneker, R. Bethea, R. Miyamoto, S. Christensen, D. Carlsmith, M. Medeiros, D. Laxon, Mrs. M. Zimring, and Judge N. Olds.

Mr. Bethea gave a short talk on the forthcoming Hawaii Island United Fund Drive and requested the cooperation and generosity of the members of both professions.

Four guests representing Hawaii Planned Parenthood were introduced. Miss Patricia Goodale, Program Director for Community Action Family Planning, Inc.; Mrs. Eleanor D'Cristoforo, Clinical Coordinator, Hawaii Planned Parenthood; Miss Henrietta Kalaikau, Office of

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Life In These Parts

Urologist **William Davis** had the floor nurses in an uproar with his precise formula for calculating the fluid intake in his watermelon-consuming hydronephrotic patient: "Calculation of fluid in watermelon A: Watermelon A—wtg 13 lbs. Save all rinds—place in plastic bag in kitchen when watermelon A is pau. Weigh rinds. Subtract from total weight. Watermelon is 95% H₂O so take 95% of leftover. Transfer weight into grams. 1 gm=1 cc."

Cas Jasinski recently had his hemorrhoids out and his wife **Doris** showed us the following statement from the Hawaii Pathologist Lab (Queen's Hospital): "Tissue Exam 2 specimens: \$13.75 Hawaii Excise Tax \$0.55 Total: \$1,235.70 CR (Ed: credit)" (Doris probably felt that if the Queen's Lab was willing to pay Cas that amount for only 2 specimens, she should go in and have 3 or more specimens out).

Kuakini Research Institute director **Mitsuo Yokoyama**, as you know, is an astute observer. When he returned from a recent trip to Poland at the invitation of the Polish Government, his first scientific comment was that the nurses in Polish hospitals were all very beautiful and miniskirted. . . .

A 51-year-old Japanese woman died several days after an elective cholecystectomy from a myocardial infarct. Surgical resident **Hirakazu Ichikawa** from Japan, whose slight language problem makes for conference humor, meant to say, "The patient *died* after the operation," but instead intoned solemnly, "The patient *disappeared* after the operation." When a snickering audience made him realize his error, he hastily added, "from the earth." (But forgot to add, "and went on to heaven.")

The Legislative Reference Committee met and members were introducing themselves around the table. When it came to **Walt Quisenberry's** turn (Walt, as you know, has been having quite a hassle over the quarantine of hippies at the Banana Patch on Maui), he rose and said, "I guess you all know me by now. I am the State Health Dept. director." Chuckled **Cesar de Jesus**, aside: "Yes, lately from Maui."

Ed Chesne returned from a six-week tour of Europe proudly sporting a magnificent reddish brown Freudian mustache-beard. Ed confesses his new look elicits varying responses from his patients. **Bill Goebert**, who had apparently achieved only a scraggly result during his trip, looked rather enviously and suggested that Ed use black shoe dye to darken the effect. . . . (Sour graves).

Pathologists **Frank Fukunaga** and **John Lockett**, reporting on 100 routine autopsies on Japanese in Hawaii, reported a 24% incidence of incidental occult papillary thyroid CA by a multiple section technique. Studies from Hiroshima on 5,000 cases showed an 18% incidence, but a 28% incidence when the multiple section technique was used. . . .

Medically Speaking

The first ETV program after the summer hiatus was "Hepatitis" with **Ira Hirschy**, **Robert Moser** and **Wini Lee** as panelists. We gathered varying references to our itinerant, hepatitis-causing, long haired, and bearded, unbathing "children of nature" residing in the now famous Banana Patch on Maui. Former Tripler colonel **Robert Moser** commented, "Since coming to Maui, I have run into these cases of hepatitis among, all euphe-

misms aside, 'The Hippies'." **Ira Hirschy** said, "The other chart shows the incidence among the hippies or 'visitors' on Maui." He later offered the information, "Infectious hepatitis is frequently called 'hippyitis' in California."

Bert Darr, as Question Central, asked: "Someone wants to know if hepatitis can be contracted from sashimi?" **Wini Lee** replied, "I don't know of any cases from sashimi, but clams and oysters, yes." **Ira Hirschy** added, "Even conventional steaming will not kill the virus in clams." Question: "My family plans to visit Maui soon. How can we keep from contracting hepatitis?" **Robert Moser** replied, "Come and enjoy yourselves, the incidence on Maui will be lower than on Oahu for sometime to come." Moderator Gordon Burke quipped, "Are you a member of HVB on Maui?" Question: "Is it possible to get hepatitis in a public bathroom?" **Wini Lee** smiled broadly, "That's a difficult question, but I suppose it is possible." Question: "How can one tell if one of oriental extraction has jaundice?" **Wini Lee's** classic comment was: "By looking at the whites of their eyes." When someone asked, "Can a plumber contract hepatitis?" Urologist **Cesar deJesus**, who was the program coordinator, wondered, "How about us glorified plumbers?" Gourmet **Wini Lee** finally got his dander up when someone asked if opihi could cause hepatitis: "I don't think we should convey the idea that we should stop kissing, or eating clams, sashimi, and opihi."

Sportsmen

We all knew **Roy Tanoue** was a serious golfer, but never realized how serious until we learned from fellow golfer **Mike Okihiro** that Roy says "hello" on the first hole, then nary a comment during the entire 18 holes of play, and finally speaks again on the 19th hole. (That's real seriousness.)

Our favorite golf partner **Frank Fukunaga** has recently taken to throwing his brand new clubs high into the air whenever he duffs a shot. This form of ventilation certainly improves his game, but we do caution members in his foursome against walking in front of him lest they cross the path of the offending club.

Surgeon **Noboru Akagi** is as adept with a Japanese sword as with a scalpel. Noboru and a five-man Hawaii Kendo team recently participated in an International Kendo Tournament in Osaka where they placed 3rd after defeating teams from England and Okinawa. Later, he participated in a promotional tournament in Kyoto and was promoted to a cherished 6th Grade. . . .

Conference Humor

During an Oncology Conference, an 82-year-old man, with a history of smoking a pack a day for 40 years, developed a lung mass six years after excision of a Grade 1 papillary carcinoma of the bladder. Moderator **Noboru Oishi** asked impatiently, "Sputum came back as Class 4. What does it mean?" Pathologist **Grant Stemmerman** hedged, "It is one shade less than diagnostic," but offered, "Epidemiological studies show a rise in GU cancer in Japanese in Hawaii which is as spectacular as the rise in Colon CA. I suspect it is related to smoking. . . ." "But the Japanese are much heavier smokers," someone complained. Someone else suggested a bone scan

and urologist **Masaru Koike** commented, "60% of bladder CA show bony metastasis." Radiologist **Carl Boyer** added the damper, "Bone scan with strontium is inconclusive since even arthritis can cause a positive bone scan." So where are we now?

In this day of unlisted physician telephone numbers, we were intrigued by U of H toxicologist Louis Casarett who offered his phone number (737-3772) for any physicians in dire need of identifying the nature of a drug ingested. With 5cc of blood, he can in 10 minutes identify the probable class of drug such as marijuana, amphetamine, indole, opiates, and barbiturates. With another 30 minutes to three hours, he can identify the specific indole: eg, LSD, etc. To illustrate how gullible people are, he disclosed how "Sleep-eze" is sold for 2 to 5 dollars apiece when packed in a red capsule and how Japanese tea was being sold on Windward Oahu as a new kind of marijuana. . . . Perhaps the Better Business Bureau should be informed. . . .

3rd Annual Kaiser Symposium

The annual Kaiser Medical Center symposium moved back to the University's Kuykendall Auditorium from Princess Kaiulani and we were again able to gorge on the mixed cuisine of char siu with potato salad, tempura, and teriyaki meat with butter rolls prepared by the master Kaiser chefs instead of the monotonous Spencecliff menu. Stanley Batkin paid special tribute to the late **Phil Chu**, who was the prime mover in initiating these annual symposiums. Guest speaker **Charles Berry** of NASA fame was moved up to first speaker because he had a plane to catch, but when an attractive brunette greeted him with a large red carnation lei and a luscious kiss, he remarked, "I may decide not to leave yet." We gathered the following items of interest:

- One of the hazards of space travel is "what to do when one's waste drops into someone else's lap."
- Illness is a real part of space flight and not things we can immunize against, eg, upper respiratory and GI tract illnesses. . . .
- Adding 40% nitrogen to 60% oxygen stopped the loss of red blood cell mass encountered with 100% oxygen.
- Labyrinthitis plagued the Soviet astronauts and the Russians had all but concluded that the only explanation was that their flights were over the Soviet Union. . . . but they were simply delighted when one of our astronauts developed labyrinthitis on Apollo 8.
- The biological phenomena stemming from lunar material includes a 400% increase in growth of plant life and the bacteriostatic or bactericidal quality of "depth" material.
- The Skylab experiment is the next project and "we are trying to commit man to a two-year flight to Mars." Toilet facilities are up on the wall of the Skylab, but this doesn't matter because of the weightless state of astronauts. One of the most difficult problems, however, is how to collect and freeze urine specimens for future analysis.
- Sleep will be recorded with an EEG cap and analyzed while in flight.

Then followed a monotonous film report on the heroic exploits of the Apollo 11 and 12 and the ill-fated Apollo 13 flights. . . .

After a welcome intermission with coffee and cookies, we listened to **Clifford Strachley's** report on reconstruction of femoral arteries. After using the Dacron graft, reversed saphenous vein grafts and the saphenous vein in situ, Cliff found that the saphenous vein in situ worked the best. . . .

Dermatologist **Richard Fardal** briefly described a 58-year-old man with scalp nodules, painful proximal muscle groups, fever, weight loss, and a sed rate of 75 (which is apparently diagnostic for polymyalgia rheu-

matica), but in which biopsies showed necrotizing vasculitis and the patient responded dramatically to steroid Rx.

Urologist **James Dow** feels that cryosurgery rather than TUR of the prostate is the answer for poor risk patients because of less mortality (1-3% vs 0-0.7%), less morbidity (23% vs 13%), fewer post op days (5-7 days vs. 2-4 days) and less blood loss (200-1800 cc vs 20-200 cc).

The second guest speaker, **Choh Hao Li**, Director of Hormone Research Lab, San Francisco Medical Center, UC, was introduced by Englishman-humorist-endocrinologist extraordinary **Fred Greenwood**, whose commentary always makes for audience delight. Fred modestly commented, "I'm no shnook in endocrinology myself, but I'm a boy compared to Dr. Li. . . . The number of people he has trained is legion. . . ." When Choh was presented the traditional lei with a kiss by a buxom maid, we could see a slow blush grow on his face to match the red red carnation lei around his neck, and the famous endocrinologist stuttered: "First time when I lecture that I am kissed by a young lady. . . ." When he had regained his composure, he explained apologetically, "I'll present a group of slides. . . . If you do not understand, it is because I don't either. . . ." We gathered from his lecture that the HGH (human growth hormone) is a combination of GH (growth hormone) and prolactin (lactogenic hormone). Since prolactin is a growth hormone for lower animal forms, the endocrine properties of these lactogenic and growth hormones gives us an insight in the genetic tree. To study the lactogenic properties of HGH (a 188-amino-acid molecule), he explained, "One of my colleagues had to go to Mexico to prove this property. . . (then, sotto voce). . . . We cannot do this experiment in the U.S."

Kaiser pediatrician **Yi-Chuan Ching**, who followed in the wake of Cho Hao Li, complained, "I feel like the pituitary dwarf in Dr. Li's lecture following the pituitary giant." Yi Chuan's studies showed that nursing Oriental infants have more physiological jaundice than nursing Caucasian infants, but that nursing Oriental infants in Hawaii have less physiological jaundice than infants in the Orient for reasons unknown. . . .

Professional Moves

The medical community is a constant flux. . . . In September, as ENT man **John Robert Watson** ventured into solo practice at the Alexander Young Building, **Jene W. Doo** replaced him at the Honolulu Medical Group. We note a gathering of orthopods at Suite 403, Ala Moana Building; **Albert Chun Hoon** has moved from Suite 606 and **Larry Gordon** and **Alan Pavel** have relocated from their Suite 520. **Myron Shirasu** is back from the wars unscathed and rejoined the Central Medical Clinic. (We learned that Myron was not exactly idle during his tour of duty in Japan, for he got himself married.) On Maui, **Edward Underwood** joined the Maui Clinic at 53 Puunene Ave., Kahului and OB man **Wolfgang Pfaeltzer** associated with pediatrician **William Kepier** at 53 Puunene Ave., Kahului and at 858 Front St., Lahaina. On Hawaii, Hilo's grizzly **Rudolph Wiperman** retired after practicing 35 consecutive years (except for a tenure with the U.S. Army in Korea during the Korean War). For a change of pace, **Rudolph** left for a two month service as a volunteer physician in South Vietnam. **DeWitt Hendee Smith** moved into his office at 453 Wai'anuenue Ave., Hilo.

In October, general surgeon and medical historian **Charley Judd** opened his office at 3675 Kilauea Ave. from whence he will teach at the Medical School and do private practice as well. General surgeon **Keith Kuhlman**, who was with the Windward Medical Group, and orthopod **Charles Barnes**, who was with the Honolulu Medical Group, joined forces and relocated to Suite 518 at 1441 Kapiolani Blvd. "Gypsy Doctor" **Roberto Moulin**, who had a writeup in the October issue of *Beacon* magazine, relocated to Kahala Office Tower Room 507,

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COUNCIL MEETING

September 18, 1970 — 5:00 P.M.

Mabel Smyth Building — Lanai

PRESENT

John J. Lowrey, presiding; Drs. Batten, Chinn, Dang, Frissell, Helms, Iaconetti, Sloan, plus Drs. Goto, DeJesus, Lee, Watson, Mr. V. Thomas Rice, and Mrs. Sydney Fujita.

MINUTES

ACTION:

It was voted to accept the minutes of the July 24, 1970, meeting as circulated.

COMMUNICATIONS REQUIRING ACTION

Correspondence from Dr. Beverly C. Payne: Dr. Payne's letter outlined the seminar procedures he wishes to hold. The question was raised as to the possibility of conducting seminars for doctors on the neighbor islands as well. In view of Dr. Payne's recommendation for seminars on office care in addition to the ones planned for the hospitals, the Council moved and acted to request Dr. Payne to submit a report prior to any commitment on seminars.

ACTION:

It was voted that a letter be written to Dr. Payne asking him to include a representative from the neighbor islands in one of the four seminars scheduled or in one separate seminar.

ACTION:

It was voted to inform Dr. Beverly C. Payne that the HMA would like a seminar on Peer Review of office care.

There was one dissenting vote by Dr. Frissell.

Correspondence from Dr. Fred I. Gilbert, Jr.: As Medical Director of the Straub Medical Research Institute, Dr. Gilbert asks the Council to endorse the concept of a study to evaluate the quality and acceptability of non-physician managed/physician supervised clinics for chronic diseases.

ACTION:

It was voted to endorse the concept of the study.

Request from Hawaii Chapter of SAMA: The President of SAMA Hawaii submitted the budget of their organization and a brief description of some of their proposed projects.

ACTION:

It was voted to appropriate \$200 for SAMA Hawaii.

REPORT OF THE SECRETARY

ACTION:

It was voted to approve the Secretary's report.

REPORT OF THE TREASURER

The Treasurer pointed out that the July 31, 1970, balance sheet which has been circulated has not been audited. The report was reviewed and discussed.

ACTION:

It was voted to accept the July 31, 1970, balance sheet subject to audit.

ACTION:

It was voted to approve the Treasurer's report as circulated.

REPORT OF THE COMMISSIONS AND COMMITTEES

Finance Committee: The following recommendations were made by the Finance Committee:

1. That the president and the treasurer of the HMA and the HCMS be appointed as the governing body of the combined staff and common fund operation.

ACTION:

It was voted that the president and treasurer of each organization assume the responsibility of the Executive Board of the combined operation; that checks for budgeted items require two signatures, one of which may be the Executive Director's; and that checks for nonbudgeted items require the signature of one officer from each organization.

2. That Peat, Marwick & Mitchell be named the acutary consultant for the combined retirement program.

ACTION:

It was voted to approve recommendation No. 2.

3. That Alexander Grant & Company be named the auditing firm for HMA and HCMS effective July 1, 1970.

ACTION:

It was voted to approve recommendation No. 3.

Commission on Education and Scientific Research: The following recommendations were made:

1. That the Hospital Committee continue to function following a revision of their present functions so that it may hopefully become a meeting ground for physicians and hospitals in interhospital relations relative to HMA.

ACTION:

It was voted to accept recommendation No. 1.

2. That the existing AMA-ERF Committee be named the Scientific Research Committee and that new functions be established.

ACTION:

It was voted to accept recommendation No. 2 and refer it to the Bylaws & Parliamentary Committee.

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★**Healthful School Environment**

By Charles C. Wilson, M.D., and Elizabeth A. Wilson, Ph.D., \$6.00, National Education Association, 1969.

Healthful School Environment is the third book sponsored by the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. *Health Education* and *School Health Services*, the other two parts of the trilogy, were revised in 1961 and 1964. This book brings up to date a total school health program reference library.

The text discusses the school environment and health. Each chapter describes specific problems in school facilities, lighting and acoustics, air conditioning, heating and ventilation, water supply, plumbing, and water disposal, and school food services. The emotional setting of the classroom, the teacher, the administrator are all presented in relationship to the environment for the pupil's health. Physical education and athletics is discussed in relationship to the provision of safe and sanitary conditions for activity programs and encouragement of desirable health practices.

At the end of each chapter, the authors have given references "for further reading." These are specific readings in relationship to the subject presented in each chapter such as the Handbook for School Custodians, Public Health Drinking Water Standards, Light, Vision, Learning, etc.

This book is strongly recommended as a reference book to teachers, school administrators, members of boards of education, school nurses and physicians, all those who are responsible for planning or conducting a school health program.

CALVIN C. J. SIA, M.D.

★**Textbook of Surgery**

By Warren H. Cole, M.D., and Robert M. Zollinger, M.D., 9th ed., 1294 pages, illus., \$14.75 (paper), Appleton-Century-Crofts.

THIS NEW EDITION is highly recommended. Beginning with the chapter on the history of surgery, the subject is presented in a clear and readable fashion with up-to-date developments in all fields of surgery by 67 authoritative contributors. The illustrations are good, and complicated graphs and tables are absent. Unfortunately, organ transplantation is omitted.

There are several features with which the reviewer was favorably impressed. First, this edition is in paperback, considerably cheaper than the hardback. Furthermore, durability or shelf life are not too important when one realizes that a new edition will be forthcoming in a few years. A chapter on biomedical engineering has been added. In this era of rapid technological advances in electronic hardware, computerized medicine is probably in its infancy.

Third and most fitting, the concluding chapter is on ethics and law. The deteriorating image of doctors, accompanied by increasing number of claims against physicians, makes re-evaluation of our position timely.

FRANCIS ODA, M.D.

★ means highly recommended.

Orthopedic Roentgen Atlas

P. F. Matzen and H. K. Fleissner, 477 pp., illus., \$45.00, Grune & Stratton, 1970.

THE ORTHOPEDIC ROENTGEN ATLAS of Drs. Matzen and Fleissner as translated by L. S. Michaelis is a publication of Dr. Matzen's teaching file. Although his file is complete as a teaching file for a young radiologist or an orthopedic resident, it does not reach the desired level for significant value to a more advanced student. He is to be complimented for the completeness of his atlas of classic orthopedic problems.

Unfortunately, for the needs of the established radiologist and the established orthopedic surgeon, the classical examples he displays are of little use except for a quick review. There is a noticeable lack of documented early changes, mild and aberrant cases, and an almost total lack of differential diagnosis. The comments are for the most part clear and concise but stereotyped.

I recommend this highly to junior orthopedic and radiologic residents. It is a quick reference for the general practitioner who takes an occasional x-ray.

This makes a good companion to "Borderlands of the Normal and Early Pathologic and Skeletal Roentgenology" by Kohler and Zimmer. However, except for the section on hip dysplasia it falls far short of a useful atlas. Perhaps a second edition enlarged 4 or 5 times with more detail and variety would truly become an "atlas" worth having on every orthopedist's and roentgenologist's shelf.

ROWLIN L. LICHTER, M.D.

Progress in Clinical Pathology, Vol. III

Edited by Mario Stefanini, 426 pp., \$19.75, Grune and Stratton, 1970.

AT THE RATE which clinical pathology is expanding, the day is not too far away when clinical pathology can only be practiced proficiently by a team of individuals concentrating on ever smaller segments of the laboratory. Meanwhile, if a clinical pathologist is conscientious and wishes at least to be conversant with a wide variety of subjects in laboratory medicine, he must peruse a staggering number of diverse references, to say nothing of collating the information. This book appears to accomplish this as part of a series written by experts in the various fields.

These topics are well selected and well written. I was particularly delighted with the first two chapters, on quality control and automation. Neither topic is new, but both require constant re-emphasis. There is an ever growing demand for large volumes of determinations at the same or lower cost even in the face of inflation. Automation has made this possible to a certain extent. The clinical pathologist must not sit back and simply assume that he can accept any and all results that will almost literally "pour" out of these machines. The clinicians, on the other hand, have not only a right but a duty to demand adequate and constant quality control to assure the dependability of the results.

I have just ordered a copy and shall place it in a readily accessible location in our laboratory.

PAUL Y. TAMURA, M.D. ■

HAWAII PHARMACISTS' BULLETIN

Official Publication of the Hawaii Pharmaceutical Association

OFFICERS

President: BETTY BELL, *Vice President:* NOEL EVANS, *Secretary:* NOLAN HASEGAWA, *Treasurer:* RICHARD HORI, *Board of Directors:* C. CACHERO, H. T. CHEE, B. CHOCK, E. ELKE, F. FRICK, R. NAITO, W. OGOMORI, J. TARASAWA, A. YEE, C. YEE.

President's Corner

Dear Colleagues:

Once again the lyrical melodies of Christmas time penetrate the very depths of our being. The laughter of children and the joy of giving infects our attitudes toward our fellowmen. Would that this spirit of good will and concern continue throughout the year and establish a world community dedicated to peace and mutual understanding.

May our profession continue to be unified by the changes in the health care delivery system, enabling us to function in the best interest of the public health and to meet the clinical demands required of us in support of our professional stature. Only you can insure the success and independence of the profession of pharmacy. Resolve to be active in your professional association in 1971. Let your Voice be heard.

My personal Aloha to each one of you this holiday season and may the new year bring much happiness to you and your loved ones.

BETTY J. BELL
President

Hawaii Pharmaceutical Association Fall Seminar: September, 1970

SEMINAR EXCERPTS:

New Developments in Pharmacy

Our grateful appreciation to Co-Chairmen Karl Miller and Noel Evans for a job well done. Plaudits and mahalo to Jean Tamaru and her associates from the University of Hawaii's Division of Continuing Education and Community Service who so efficiently administered the program.

As has been our custom, related medical disciplines have been invited to share our seminars. In addition to a large group of pharmacists, representatives of nursing and medicine were in attendance. It is never possible for all pharmacists to attend these seminars if we are to meet our responsibility to the public health. Yet it is evident by the continually increased seminar attendance that pharmacists want to keep up. This year tapes have been made of the lectures and prepared into a kit, along with the hand-outs distributed. Colleagues of our Association may avail themselves of the kit for their individual edification by contacting our Executive Secretary, Mrs. Gwen Baer, c/o Walrich Drug, Kaneohe Shopping Center, Kaneohe, Hi. 96744, phone 247-4451. She will advise you of the date that the kit is next available and reserve it for you.

The faculty from the University of Utah College of Pharmacy were well prepared and truly challenged us to the professional pharmaceutical demands we must meet in the 70's. Our grateful appreciation to Dr. Ewart A. Swinyard, Dean and Professor of Pharmacology; Dr.

Robert V. Petersen, Professor of Pharmacy, and Dr. James W. Gibb, Assistant Professor of Pharmacology.

It isn't possible to abstract an already condensed program meaningfully—but I shall try to present a brief overview of the seminar, reiterating the highlights and challenges to our professional life line.

FIRST SESSION

Dr. Swinyard opened the session by stating the objectives of the seminar to be an overview of pharmacy today, what he and others envision pharmacy will become in five years and a subsequent effort to prepare us beginning NOW to meet the demands of our profession in 5 years.

The pharmacist must attack vigorously his status of "professional isolation," for in the next few years the shifting population to urbana will present us with a striking contrast to the health care delivery system we are presently experiencing. We *must* become a meaningful member of the health team. Neither physicians or pharmacists can be trained in the numbers required to meet the health needs of the 400 million people in the year 2000. Sub-professionals will necessarily be utilized in order that the available skilled professionals can be used to best advantage.

Pharmacy educators must recruit quality students, quality faculty, and train a more clinically oriented pharmacist. Pharmacists *must* be prepared to take admission drug histories, monitor long term therapy, correlate laboratory findings, provide drug information, interrupt and intercept possible drug reactions, as well as maintain patient drug profiles and prepare drug discharge summaries. To accentuate the need for pharmacists to function in a clinically oriented sphere, Dr. Swinyard reminded us that 1½ million drug reactions occur annually accounting for every 7th inpatient day. We are the best trained professionals to meet this challenge and prevent drug misuse and interaction.

"Are You Big Enough for the Job?" You can be!!

FACTORS MODIFYING DRUG ACTION

Dr. Gibb stated that the amount of drug administered, extent and rate of absorption, distribution, binding or localization of tissues, inactivation and excretion are all factors that effect drug action.

Drugs must necessarily be transferred across membranes to have a systemic effect. Membranes are lipid in nature and drug transfer across them depends on the following physiochemical factors. (1) Passive processes, (2) Weak electrolytes and influence of pH, (3) Active transport systems. The non-ionized form of a drug is lipid soluble—the ionized form is non-lipid soluble—a change in pH changes ionization and thus effects transport of the drug across a membrane.

In addition to the physio-chemical factors described above, absorption depends on solubility, concentration, circulation at the site of absorption, absorbing surface

and route of administration. Distribution of the drug is important to its effectiveness, length of action and its possible interactions. Several storage depots are utilized—for instance, Butazolidin is stored in the plasma protein, quinaquine in the liver (Cellular depot), thiopental in fat. Distribution is also dependent upon drug penetration into the CNS and CSF, placental transfer and whether or not a drug is redistributed—as thiopental going into the muscle after a period of time.

Drug action is effected by biotransformation, a process of polarization primarily in the liver resulting in activation or inactivation of a drug. Ex. Phenobarbital is inactivated by hydroxylation. Biotransformation occurs by any one of the following processes—oxidation, reduction, hydrolysis or synthesis.

Drug action is also affected by excretion processes, the most important route being renal excretion by the kidney. It is well to remember that more polar compounds are excreted more rapidly. Numerous other factors modifying drug effects are—bodyweight, age, sex, route of administration, time of administration, rate of inactivation and excretion, tolerance, physiological variables, pathological states, milieu, genetic factors and drug interactions.

Drug toxicity and drug induced diseases are a by-product of our civilization we pharmacists can do something about—by being better informed and utilizing our knowledge in a patient oriented practice. There are one million drug poisonings each year—in addition we see drug allergy, blood dyscrasias, hepatotoxicity and nephrotoxicity, teratogenic effects, behavioral toxicity and last but not least drug dependence and drug addiction.

“Are you doing your part as a drug information specialist?”

Dr. Gibb also spoke of drug interaction. Interactions can occur before the drug even gets into the body—for instance, tetracycline is chelated in the presence of calcium. Phenylephrine or bisulfate reacts with penicillin.

Once in the body interactions may occur in the gastrointestinal tract due to pH changes, rate of passage, drug binding or changes in intestinal flora—*Examples*: antacids; digitoxin and tetracycline are slowly absorbed if given with a cathartic one gets less effect; tetracycline is (bound) chelated by metals resulting in erratic absorption, antibiotics may destroy bacteria therefore destroying Vit. K thereby increasing the effect of coumadin.

Interaction is effected by metabolism largely by induction of liver microsomal enzyme systems. Interactions are also affected at the adrenergic neuron (for example the action of Guanethidine (Ismelin) by tricyclic antidepressants) as well as at the receptor site. Excretion is an important factor of drug action and is influenced by weak acids NH_4Cl , weak bases, NaHCO_3 and by metabolic acidosis or alkalosis.

NEW DEVELOPMENTS IN DRUG THERAPY

Dr. Gibb related a new approach to chemotherapy research. As exemplified by L-Dopa, the trend in research today is to isolate the biological defect causing a condition and then develop the drug to provide the missing link. Heretofore our pharmaceutical manufacturers have screened thousands and thousands of compounds for possible medicinal activity. To correct the biological deficiency demonstrated seems a much more realistic and less costly approach to chemotherapy.

It was found that patients having Parkinson's Disease exhibited a marked decrease in the dopamine content of the brain ganglion. The rationale for the treatment of Parkinson was obviously to supply dopamine through its precursor L-Dopa.

The recommendation for the use of L-Dopa as described by G. C. Cotzias et al., Correspondence, New Eng. J. Med., 281:272, July 31, 1969 follows:

The optimal daily dose . . . has averaged 5.8 gm per day (maximum, 8 gm per day), and maximal improvement has rarely been achieved in less than six weeks. In some cases we and others have noted

further improvement several weeks after a steady dose was established. . . It is likely that the vomiting, anorexia and orthostatic hypotension encountered by others upon starting the regimen was due to a rapid rate of increasing the drug. . . Distribution of the daily dose among at least six or seven portions appeared essential with the present short-lived form of the drug. . . We strongly disagree with the administration of three or four equal portions to all patients. . . We have considered monoamine oxidase inhibitors and psychoenergizers potentially dangerous. Reserpine, phenothiazine derivatives, antiemetics, tranquilizers and alpha-methyl dopa are capable of defeating the therapeutic purpose of L-dopa in Parkinson's syndrome.

Adverse Effects

1. Most serious—orthostatic hypotension, cardiac arrhythmias
2. Cerebrovascular insufficiency and stroke have been reported
3. Other side effects—anorexia, nausea, vomiting, and dyskinesia
4. Occasionally delirium and hallucinations

Conclusion

1. Levodopa has been successfully used in the treatment of a number of Parkinsonian patients with side effects occurring in relatively few persons if the drug is administered properly.
2. As with all new drugs, it is probable that longer and more extensive use will disclose new adverse effects but most often the risk outweighs the hopeless invalidism and despair.

Rifomycin—Will likely be marketed by Ciba or Dow

Rifomycin is a complex macrocyclic antibiotic produced by streptomyces mediterranei that is effective against the tubercle bacilli. Clinically rifomycin has been very effective in combination with other antituberculosis drugs for initial therapy and in situations where resistant strains have formed. Use against nontuberculous infections is not advised as resistant strains do form.

Dosage—600 mg administered on an empty stomach produces blood levels many times higher than needed to inhibit the tubercle bacillus. Blood level is maintained from 12-24 hours.

Adverse effects—Increases in SGOT, alkaline phosphatase and serum bilirubin occasionally, these return to normal when drug is discontinued. Rare skin rash and leukopenia, thrombocytopenia and purpura have been reported.

In conclusion rifomycin is an effective major anti-tuberculosis drug but other agents should be used initially.

Carbenicillin (Pyopen-Beecham, Geopen-Roerig) is the first semi-synthetic penicillin active against Pseudomonas. Carbenicillin is bacteriocidal for most strains of Pseudomonas Aeruginosa, but only in high concentrations.

It is moderately active against most strains of proteus resistant to ampicillin, the drug of choice in most Proteus mirabilis infections—has some activity against E. Coli and enterobacter but not against Klebsiella. It is less active than other penicillins against grampositive cocci.

The best indication for its use is for Pseudomonas infections of the urinary tract (Dose 4 Gm/day I.V.) Systemic infections require very high doses or resistance will develop (12-30 Gm/day I.V.).

Adverse effects—remarkably low toxicity in spite of high dose—high sodium content may be contraindicated in edema, hypertension or renal insufficiency—hypersensitivity, phlebitis and superinfection have been reported.

In conclusion, a very useful drug for hospital treatment of urinary tract infections caused by susceptible strains of Proteus resistant to penicillin and pseudomonas aeruginosa. Safer in patients with diminished renal function than polymixin B, polymixin E, gentamicin or kanamycin.

Doxepin (Sinequan-Pfizer) is promoted as the first single agent with patient antianxiety and antidepressant action and recommended for a wide range of psycho-neuroses and psychotic depressive disorders.

Adverse effects—anticholinergic effects, hypotension, extra pyramidal symptoms and frequent drowsiness.

The antidepressant response may not be evident for as long as three weeks.

In conclusion, doxepin does have antidepressant and antianxiety effects in many patients but its superiority to other drugs has not been established.

FORMULATION FACTORS AND DRUG AVAILABILITY

Dr. Robert V. Petersen very aptly described the need to consider the influence of formulation factors on Drug availability. A drug product differs from a Drug. A drug must reach the site of action in a short time and in sufficient concentration to be effective. The pharmacist should be in the best position to judge efficacy of a drug product. He should be capable of answering queries about which drug should be given, which formulation should be used, duration of chemotherapy and which physiological and environmental factors may alter drug response.

The literature is full of examples of variations in drug availability. Ex. ten mg tablet of warfarin not equivalent to two 5 mg tablets, benzalkonium chloride loses activity when applied with cotton, PABA effective in Polyethylene syringe, not in nylon syringe, etc.

The terms utilized in studies on drug availability should be defined as follows:

Biopharmaceutics . . . "a study of the factors influencing the extent and rate of absorption or release of a drug from its various dosage forms in the light of the pharmacodynamic properties of the drug and the anatomical and physiological features of the absorption site."

Pharmacokinetics . . . "pharmacokinetics deals with the concentration of a drug or its metabolites in the human or animal body upon administration" i.e. the rate of drug liberation.

Disintegration . . . disaggregation of solid dosage forms (reversed tableting processes).

Dissolution . . . the process of going into true solution.

Drug Liberation . . . the release of the drug from its dosage form.

Drug Absorption . . . penetration of a drug through biological membranes to reach the bloodstream.

Dr. Petersen briefly reviewed membrane physiology as appropriate to aid our understanding of the mechanisms of membrane transport and drug absorption. Drug absorption depends on the liberation of the drug via disintegration, dissolution, and diffusion. Factors affecting drug absorption are water solubility, lipid/water partition coefficient and the degree of ionization.

Numerous formulation factors affect drug availability—For example—tablet hardness, nature of disintegrating agents and the nature of binding agents affect the Rate of disintegration. Dissolution is affected by crystallinity, crystal type, crystal size, coatings and the form of the drug. Diffusion is affected by agents which increase viscosity and Ionization by agents that affect pH. Many other miscellaneous factors affect drug availability—such as containers (rubber closures react with mercury preservatives), action with other drugs, sensitivity to digestive enzymes, and other complexing agents.

LEGISLATION—THE OMNIBUS DRUG LAW

Dr. Petersen capably explained the pending "Comprehensive Drug Abuse Prevention and Control Act," some form of which will likely pass the next session of Congress. The house bill HR18583 seems to this writer to best accomplish the objectives of drug abuse prevention. Very briefly this bill would divide all controlled substances into five schedules, imposing levels of control on manufacturers, distributors and dispensers (phy-

sician and pharmacist) of these substances. The control authority would rest with the Department of Health, Education, and Welfare and HEW's recommendation would be binding on BNDD. All five schedules would be identified by a distinctive symbol.

Items of Interest

News of Our Colleagues

In September, the Hawaii Pharmacy Board Examinations were given and we wish to welcome these new pharmacists to Hawaii. We congratulate and welcome the following pharmacists for successfully passing the pharmacy boards in September: Robert Kenneth Beriman, James Michael Brown, William T. Burns, Mei-Ling Chooi, Tom H. Clark, Michael W. Corcoran, Ginger Kazue Fukushima, David Woon Tong Ho, Karl Johannes Kuebitz, Gerald King Kee Lau, Wang-Chung Thomas Li, Robert Carroll Martin, Jr., Dan Matsumoto, Mary W. McMillan, Sheldon Ramer, Yvonne Tom, and Lauren Sun Fook Wong. We look forward to your active participation in the Hawaii Pharmaceutical Association.

Bob Craft writes from Kahului, Maui, that Bob Orleck, former manager of Craft's Drugs in Lahaina has passed his real estate examinations and has taken the Hawaii Bar examination in September. A very talented person—who else can claim to be a Lawyer, a Pharmacist and a Realtor?

Sheldon Zimmerman is the new manager of Craft's Drug in Lahaina. Sheldon had previously been with the Maui Medical Group in Lahaina and Hughes Drug.

We have learned that Kaiser now has two clinics on Maui—both of which are operating without a pharmacist!!

Board of Directors Meeting

On September 11, 1970 at 7:30 P.M., a meeting of the Board of the Hawaii Pharmaceutical Association was called to order at the Queen's Hospital by President Bell. Those present were: B. Bell, N. Evans, R. Hori, C. Cachero, E. Ehlke, C. Yee, J. McElhiney, R. Naito, W. Ogomori, A. Yee, J. Tarasawa, H. T. Chee, S. Kosasa, C. Preston, O. Turk, L. Wong, D. Weber, and G. Pang.

The minutes of the last Board meeting were approved as read except for one correction. The Membership Committee is to work on the HPhA Directory instead of the Aloha Committee.

TREASURER'S REPORT:

The treasurer's report was approved as read.

STANDING COMMITTEE REPORTS:

1. *Membership*—R. Naito reported that 58 members and 20 associate members have paid their dues.
2. *Convention*—O. Turk reported that everything is moving along smoothly. The U. of H. Convention Bureau is doing a fine job. The Princess Kaiulani will be the headquarters for the Convention April 2-5. Aloha Airlines will provide free entertainment at the cocktail party. There will be a registration fee of \$79.00. Notices for the Convention will be in the APhA Journal. Letters are being sent to all state associations.
3. *Drug Abuse*—The goals of this committee are:
 - a. To provide a team of pharmacists who can produce a demonstration with rabbits on amphetamines and barbiturates. This team is to work with the pharmacology department of the U. of H. This demonstration will be made available to any interested social group.
 - b. To provide literature for social groups.
 - c. To provide literature for the newsletter.
 - d. To draw up a HPhA Rx form.

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Inoguchi, Kiyoshi	288	Yamakido, Michio	27, 118, 205, 446
Kasugai, Tatsuzo	288	Yamamoto, Takaki	288
Kim, John H. C.	205	Yokoyama, Mitsuo.....	27, 118, 205, 288, 365, 446, 568, 623
Kobayashi, Kozo	288	Yu, Lina	637
Lin, T. K.	27, 205		

3. That Council approve the recommendations of the Medical Education Committee re the Hawaii Medical Library, Inc. except for Recommendation No. 1.

ACTION:

It was voted to postpone the matter of the Hawaii Medical Library, Inc. until the Chairman of the Medical Education Committee has a chance to discuss the report. There was one dissenting vote by Dr. Batten.

4. That Council appoint the Medical Education Committee or an ad hoc committee to study, in depth, the alleged problems of the Hawaii Medical Library and that a report of these findings be made before the next House of Delegates meeting and also forwarded to the Hawaii Medical Library, Inc.

ACTION:

It was voted to postpone this recommendation until Council has had a chance to hear from the Chairman of the Medical Education Committee.

Commission on Legislation: The report of the Commission was circulated, reviewed, and discussed.

ACTION:

It was voted to accept the report as circulated.

Commission on Internal Affairs: The Council was given a progress report of the arrangements for the 1971 Annual Meeting.

Commission on Medical Services: The report of the Commission was circulated, reviewed and discussed.

The proposed Workmen's Compensation Fee Schedule was discussed. The Council was informed that Mr. Hasegawa has said that any carefully worded letter giving specific reasons and indications telling him why what is contained in his proposals is not right will be considered. Any abusive letter will not be given any consideration. It was pointed out that when writing letters, specific examples pertaining to workmen's compensation cases should be used.

Commission on Public and Interprofessional Relations: The Commission had the following recommendations:

1. That the Council endorse the concept of a study to evaluate the multiphasic screening operation for chronic diseases by the Straub Clinic Research Institute for a grant request to NIC.

ACTION:

It was voted to accept recommendation No. 1.

2. That Council approve the Health Manpower request of \$500 to send Dr. Goebert to the AMA National Congress on Health Manpower meeting in Chicago.

ACTION:

It was voted to deny the request for \$500.

It was reported that HMA is not in a position, budget-wise, to send representatives to meetings on the mainland. However, Dr. Lowrey pointed out that HMA will pay the per diem of a physician who is in the area and attends the meeting.

Commission on Public Health: The following recommendations were made:

1. That Council endorse the RMP Hawaii Dietetic Association Project.

ACTION:

It was voted to accept recommendation No. 1.

2. That Council endorse the first aid chart of the

Academy of Pediatrics for the Department of Education School Health Complexes.

ACTION:

It was voted to accept recommendation No. 2.

UNFINISHED BUSINESS

Formation of Committees: Dr. Lowrey reported that he has surveyed the membership to get interested physicians to serve on the Environmental Health Committee and the Community Health Services Committee.

Principles for Community Health Services Committee: The following principles were circulated to the Council for approval. It was pointed out that the principles do not really constitute firm guidelines for procedure in community health planning but are principles upon which guidelines may be developed.

1. The basic element in the health care of any community is the physician in private practice.

The physician living and working in the community constitutes the most qualified expert in the health needs of the community and should be the primary source of advice and counsel in all planning related to health problems.

2. No program should be considered that abrogates the principle of free choice.

3. All "projects" should have the capability of being self supporting in its projections. Temporary and demonstration subsidies or "seed" money is often effective in getting programs started but the longrange plan should envision a self supporting goal.

4. Existing ancillary organizations should be utilized rather than the establishment of new and unnecessary duplication organizations. For example, the Home Nursing Program of St. Francis Hospital, the counseling capabilities of various social agencies, the health education capabilities of the Health Department and the Department of Education, and others.

5. The principle of prepayment should be considered insofar as it does not infringe on the free choice principle.

6. A project in any community should have as its target the entire population rather than a selected group. It is unrealistic to base a program on the so-called "disadvantaged," to the detriment of the balance of the population.

Dr. Iaconetti pointed out that the Maui County Medical Society reviewed these principles and did not feel that these principles are applicable statewide. It was the feeling of the Maui County Medical Society that these principles came about as a result of the Nanakuli-Waianae situation, and was not appropriate for the entire state.

ACTION:

It was voted to adopt the six principles for the Community Health Services Committee.

Prepaid Medical Plan on Maui: Dr. Iaconetti reported on the problems in Maui relative to new contract negotiations for several of the unions. He reported on the negotiations with the Foundation for Medical Care for free choice coverage program.

Both management representatives and union officials had met and indicated interest in the Foundation Plan. Dr. Iaconetti was advised that both carriers under the Foundation would require complete census data on all employees in order to make quotations on rates. Dr. Iaconetti also stated that the only census information of this type was available through HMSA, and HMSA has not provided this information.

Malpractice Insurance: Mr. Thorson reported that the malpractice insurance situation is still under study. Local possibilities have not been exhausted, however, the door is open for help from HEW since they have offered to help. How much help HEW will be is questionable. Mr. Miyoi, the Insurance Commissioner, and Mr. Honda,

head of the Department of Regulatory Agencies have been very helpful, and it is entirely possible they will come up with answers for us. Mr. Thorson reported that there is indication that several physicians do not know what is happening to them and will not find out until they try to renew their policy. Mr. Thorson stated that this information has been announced in the HCMS and HMA Newsletters. Mr. Thorson also said that there are some 30 items of legislation that will affect malpractice insurance coverage and they range from redefinition of the statute of limitations to the point of limitations for liability and feels it is incumbent upon the HMA Legislative Committee to begin immediate exploration of what items may be most appropriate in Hawaii.

Policy statement on financial responsibility of HMA in developing Councils: A prepared policy statement was circulated, reviewed and discussed.

ACTION:

It was voted to postpone action on adoption of a policy statement until the next meeting.

Dr. Batten volunteered to rewrite the policy statement which was circulated.

Report of Meeting with Dr. Roger Egeberg of HEW re DSS: Dr. Sloan reported that Drs. Lowrey, Mills, Sloan, and Mr. Thorson met with Dr. Egeberg. The DSS situation in Hawaii was thoroughly discussed and Dr. Egeberg felt that problems should be resolved at the local level but perhaps with a little pressure from Washington, DSS and HMA might be able to communicate again.

Dr. Lowrey asked Council's permission to have Mr. Thorson, at a staff level, contact Mr. Millar to find out what is going on and to see if some kind of communication can be carried out. There were no objections.

Report of HCMS and HMA merger and Common Fund Operation: Mr. Thorson reported that as of September 1, 1970, the merger and common fund operation became effective.

NEW BUSINESS

Letter to HMSA: A draft of a letter to HMSA, in answer to their letter relative to the use of a specialty fee schedule being used by some physicians, was circulated, reviewed, and discussed.

ACTION:

It was voted to send the letter, as drafted, to HMSA.

It was recommended that the letter be directed to the President of the HMSA Board.

Report on the School of Public Health: Dr. Lowrey reported on a study being conducted by Dr. Robert Mytinger of the School of Public Health. The study had been conducted without HMA involvement until the study was virtually complete. Dr. Lowrey discussed the situation with Dr. O'Rourke stating that HMA would prefer participation before the fact rather than after the projects are completed.

Dr. Lowrey further reported that Dr. Mytinger is the Chairman of the DSS Advisory Committee. Others on the Committee are Drs. Batten, Patrick Walsh and Calvin C. J. Sia. (Dr. Sia had to resign because meetings are scheduled for 2:00 P.M.) It was pointed out that the DSS is working with the School of Public Health and Dr. Mytinger is doing things which do not have any evidence of medical approval. Dr. Lowrey felt it is imperative for the HMA to open communication lines with DSS in order to become more involved in the activities being conducted.

AMA Clinical Convention: It was reported that Dr. Mills and Mr. Thorson will be attending the AMA Clinical Convention in Boston in November. Mr. Thorson stated that Tradewind Tours will be helping to promote Hawaii for the 1975 Clinical Session at 'ha' meeting. With the help of this travel agency, Dr. Mills recom-

mended that there was no need for HMA to have a Hospitality Room at the convention.

Request from Dr. Unoji Goto: Dr. Lowrey reported that Dr. Unoji Goto is involved in raising money for the Aloha United Fund and that Dr. Goto asked if his letter to the medical profession could be written on the HMA stationery.

ACTION:

It was voted to approve the request of Dr. Goto.

Resolution re Management Course for Retiring State Presidents: Mr. Richard Layton would appreciate the reactions of the HMA relative to the resolution concerning the development of a management training course for retiring state presidents which was referred by the AMA House of Delegates to the Board of Trustees. One of the problems AMA has had is having a reservoir of doctors they can recommend for administrative functions in government operations, therefore, they propose to set a management course for doctors, preferably retiring state presidents, who have had experience in state medical association administration.

ACTION:

It was voted to inform the AMA that instead of restricting the management course to retiring state presidents that it be extended to other qualified individuals of the state medical associations.

ADJOURNMENT

The meeting adjourned at 10:20 P.M.

R. VARIAN SLOAN, M.D.
Secretary

Hawaii Pharmacists' Bull. continued from 658

- e. To provide an on-call-pharmacist to aid the state in drug identification through use of a kit.
4. *Poison Control*—This committee's goal is to offer a useful antidote kit for the household which a pediatrician may distribute to any mother who may have need of one.
5. *Aloha Committee*—Guide-lines for this committee are:
 - a. Act as a contact for news or information about our members and immediate families.
 - b. Initiate contact with potential members—responsible for inviting all newcomers of our profession to attend our functions.
 - c. Send cards to members and immediate family who are ill, etc. Budget: \$25.00.
6. *Public Relations*—This committee would like to provide a live demonstration for Career Day. This demonstration would be one as suggested by the Drug Abuse Committee.
7. *Seminar*—The U. of H. is doing a great job on the seminar. The speakers will be invited to the general quarterly dinner meeting. A notice about the seminar will be published in the newspaper. Military personnel will be admitted at a fee of \$5.00.

UNFINISHED BUSINESS

1. Gwen Shirai Baer has been hired for her secretarial services. (part-time executive secretary)
2. *HPhA contact*—There will be two listings in the new telephone book. One in the yellow pages and in the white pages both under HPhA. The phone number will be the same as the Walrich Drugs with Gwen Baer taking all calls. The Association will pay Walrich Drugs \$5.40 monthly plus tax.

ADJOURNMENT:

The meeting was adjourned at 9:50 P.M.

4211 Waialae Ave. Roberto, who first came to America at age 16 to play tennis, is a French-Guatemalan psychiatrist, a Windward sun-worshiper and traveler. Roberto claims, "I have gypsy blood. I wanted to see and do many things," which he has and is finally settling down as a "shrink" in Hawaii which is an environment he finds himself "not only totally comfortable within but psychologically committed to." (And what more can one want, we ask.) On Maui, the Kaiser Lahaina Clinic was augmented by pediatrician **Alexander Peat** and by **Ben K. Azman**, who trained in Canada and was more recently back home in Malaysia.

Our internationally recognized public health authority, **Richard K. C. Lee**, who retired in March, 1969, as dean of the University's School of Public Health after a diversified career and joined the Straub Clinic, was recently appointed half-time executive director of the research Corporation of the University of Hawaii, succeeding Robert Hiatt. Poor Dick, his talents are forever in demand, it seems. . . .

Walt Quisenberry has been saving **Andrey Mertz's** position since January, hoping she would tire of Alaska, but finally, unable to woo her back, appointed **J. Kendall Wallis** executive officer of the State Mental Health Division. **Donald Lombard**, from Danbury, Conn., was appointed chief of the Diamond Head Mental Health Division, and another Connecticut Yankee, **Alice Broadhurst** from Bristol, Conn., became the executive officer of the Medical Health Services Division. **David Holaday**, retired medical director of the American Can Co., was appointed to the State's new Injury Control Branch. The Health Department has also arranged for **John Ahern** (who formerly wrote the column *Keiki Care* for several years) to provide limited medical care for "Maui's young transient population."

Elected, Appointed, Honored . . .

When our alii, **George Mills**, decided to run for political office again after two successive defeats (in 1966 for lieutenant governor and in 1968 against John Hulten), we crossed our fingers. When he garnered the least number of votes from his district in the primary, we started to pray. But then our pessimism was for naught, for surprise of surprises, George, with limited campaign funds and sheer grass roots campaigning, nosed out Jimmy Clark by over 600 votes to place third and in. Now with **Dick Ando** and **George Mills**, both in government office, perhaps the physicians will have a stronger voice in community affairs. . . .

Hard-working **Paul Tamura** was succeeded as president of the Hawaii Division of the American Cancer Society by **George Bracher**, Hilo radiologist and president of the Hawaii County Medical Society, at the annual dinner meeting. **Reginald Ho** was installed as vice president and **John Withers**, **Carl Boyer** and **Mark Sowers** as board members. The Oahu Unit of the American Cancer Society elected **Clifford Strachley** for a second term and residential chairman, Mrs. Eldon Dykes, presented Clifford with a check for \$100,848.50 for this year's fund drive.

Lup Qron Pang was elected second vice chairman of the National Review Board of the East-West Center in September and in October, Lup was installed as president of the American Society of Ophthalmologic and Otolaryngologic Allergy at a meeting in Las Vegas. **Thomas Min** was selected as a member of the "Friendship Mission to the Republic of Korea, which is sponsored by the U.S. Army, Pacific Headquarters at Shafter.

Hors De Combat

Politics and Medicine? Make For Fine Bed Fellows

In August after months of crusading for more action,

John Morris, Chief of Staff at Maui Memorial Hospital, finally lashed out at Mayor Elmer Cravalho for not taking action to prevent the spread of dysentery on Maui. In May, John had tried to have the Lahaina Whaling Spree cancelled to prevent an epidemic, but the Mayor had done nothing. He had asked the Mayor to take steps to insure that the county water supply would be safe for human use, but the Mayor had done nothing. John described Mayor Cravalho as a Pontius Pilate who had washed his hands off the situation after the recent hepatitis quarantine was ruled illegal and lifted. He claimed that the Mayor waited until the day after his own big political gathering (which drew more than 4,000 people) before urging the cancellation of all other gatherings and seeking the help of the State Health Department. The Mayor in a lengthy statement to the press made a political football out of the issue by accusing John of making the statements as a member of his election rival Manuel Molina's campaign committee, and pontificated, "Health and the public good are not matters that should be used as political foils."

Meanwhile, Maui had a dysentery epidemic, "the largest recent explosion in the nation." The State Health Department with its only recently appointed trouble-shooter, epidemiologist **Lloyd Guthrie**, got into the picture and reported that the *Shigella* dysentery had begun in late 1969 with the "young transients" in the Makena Beach area and traced the source of the epidemic (an estimated 3,600 cases in the week of August 17 to 23) to a batch of poi from a certain poi manufacturer, Lloyd, commenting on John Morris' statement, said, "As we look back, we all wish something had been done sooner. But the Mayor has been extra cooperative; everything we have suggested he might do, he has done" (thus carefully appeasing both factions). As an aftermath of the Maui holocaust, Mayor Cravalho nearly lost to his political contender Manuel Molina in the November election and the *Shigella sonnei* are showing resistance to tetracyclines and ampicillin. . . .

The familiar saying goes, "We should get involved (in politics)" but poor **Walt Quisenberry** may have lost a few more strands off his scalp, or perhaps his ulcers may have acted up, when one of the candidates for the U.S. Senate, Tony Hodges, a conservationist, filed suit against him and State Attorney General Bertram Kanbara for not enforcing the State's water quality standards. Hodges claimed, "The laws are not designed to protect the large sugar or pineapple companies or to allow governmental agencies to send large amounts of untreated sewage into the water." Fortunately Judge Fukushima stopped Hodges' court action and made the point, "If you are going to stop the flow of the City's sewage, you are going to have an awful stench around the city."

Press Clippings . . .

From Hal Wood's column entitled "Sportsmen are frustrated comics": When Gus Guslander (who has \$22 million in his pocket from selling his hotels to AMFAC), acting as a bus boy in his new Keauhou Beach Hotel dining room, offered to pour coffee for golfer **Al Ho**, said Dr. Ho (who had just finished a round of golf that would drive a man to drink—but not coffee): "If you don't mind, I'll just have a cup of strychnine."

From a *Honolulu Star-Bulletin* Editorial: "MEDICAL WISDOM. Heart transplants in the world totaled 101 in 1968, 47 in 1969 and only 15 in the first eight months of 1970. The low survival rate is a factor. The figures seem to vindicate the soundness of local medical judgment. Doctors here stayed away from the headline-grabbing heart operations, but moved ahead instead in the field of kidney transplants where success provides substantial long-term improvement and the chances of success are reasonably good." (Smart cookie, this editorial writer, whoever he is.)

From Eddie Sherman's column: After Bob Cunard broke his little pinky playing volleyball, it happened on the 13th tee at Waialae, complained about his finger pain to **Dr. Kuramoto** (must be Kiku) who quickly set it. . . . (Ed.: Dear Kiku, an internist should not be setting bones. Besides you don't pay the exorbitant malpractice insurance the orthopods pay, and how do you know that the Good Samaritan Law applies in this non-emergency case?)

Another item from Eddie Sherman's column: News-flash from Bishop Kennedy's African safari: **Dr. Raymond Kong** had a loose lower front tooth removed—with a twisted kleenex—by a Dr. Stone, a Colorado Springs dentist. Kong said it was the fastest dental appointment he ever had. . . .

Yet another item from Eddie's: "When the **Richard Kelleys** (and five kids) toured East Africa this past summer, their guide one day was explaining to the youngsters about the ostrich—habits, habitat, eggs, e.c. Collcen Kelley (5½) very politely piped up . . . 'And where do they find the elephant egg?'"

Honolulu Star-Bulletin (September 21, 1970) item headlined: "1,500 M.D.s Called Tax Cheats" "The Internal Revenue Service said today that about half of 3,000 doctors who received \$25,000 or more in government Medicare or Medicaid payments in 1968 failed to report a substantial amount of their income. . . . Meade Whitaker, tax legislative counsel for the Treasury Department, said in some cases the 'omission exceeded \$100,000.' . . . The audits were ordered after the committee said there was widespread tax evasion by doctors treating Medicare and Medicaid patients. . . ." True or false. . . . There goes our cherished image again. . . .

Visiting Physicians

Jefferson Medical School's **Robert Wise**, a bespectacled, self-effacing scientist with greying thinning, frontal scalp and a quacking voice, was the visiting professor of medicine at Queen's in October. Herein are samples of his "Wise" remarks:

- re febrile agglutinins: "Never made a diagnosis with febrile agglutinins in my life."

- re antibiotic use: "The philosophy of giving antibiotics to all febrile diseases results in superinfections and inappropriate reactions."

- re staph infections: "Always ask about boils. . . . Many physicians do not think quantitatively, only qualitatively, in the treatment of staph."

- re prospective vs. episodic medicine: "The problem is that of patient orientation to prospective medicine, since the patient is accustomed to episodic medicine."

- re delivery of health care: "More and more people believe that good health care is a right of the people. Our development of technology has been fantastic . . . a technological explosion, yet we work in a primitive system. . . . The cost of health care is so high it destroys a lifetime's resources. . . . We can predict that 10 years from now there will be a change in the delivery of health care."

- re outpatient counseling: "We write orders for patients in the hospital, but send them home without counseling. . . . There is a highly documented life in the hospital, but no documentation once they leave the hospital. . . ."

During the discussion of prospective medicine and health hazard appraisal and its factors, a bearded now generation intern asked: "Do your statistics take into account the Vietnam War? Do you advise that we avoid the draft?"

The visiting professor of surgery in October was **James Cantrel** from University of Washington. James, a lean athletic type with sharp features, hair cropped short, a keen analytical mind, and a sincere, convincing demeanor, whose prominent temporal veins bulge when making a point, was well attended. . . . We were delighted when in one of his first lectures, he delved into the philosophy of medicine. He asked, "Can we treat a system with so many variables, so unpredictable as an exact science? The answer is yes . . ." and went on to explain

that with knowledge, understanding, logic, a summation of probabilities and statistics, and objectivity, medicine is an exact science. He regards the seven cardinal sins in medicine as (1) Inadequate knowledge, (2) Lack of objectivity, (3) Gunbarrel vision, (4) Generalization from a single case, (5) Inadequate observation, (6) Lack of a critical mind, and (7) Failure to think of the disease mechanism. . . . "There is no correlation of IQ with judgment . . . Judgment can be taught . . . We must teach how to make decisions, how to think rather than how to retain facts. . . . The process of reaching a correct diagnosis is not a hit or miss matter . . . It is an acquired skill and can be taught. . . . We try to see how much we can retain rather than how to think. . . ."

James feels that at least 50% of articles in prestigious journals are not valid. An article with three critical references may be more reliable than one with 30 references. When a resident quoted from Harrison's, he said, "More surgical misinformation is in Harrison's than any book I know . . . Forget that book."

We listened intently to **Stephen Ayres**, the visiting professor of medicine at SFH from St. Vincent's Hospital. Stephen, a young, ruddy complected intellectual, with upturned nose, sans the usual sideburns, beard, and long tresses common to the new breed of visiting physicians who impressed us with his knowledge of physics as well as medicine, warns, "All is not well in the treatment of myocardial infarction . . . We lose 25 to 30% of the patients . . . There is need for new approaches. . . ." Stephen feels that norepinephrine is more effective than Isuprel, provided it is used early and with an intra-arterial catheter in place to regulate the mean arterial pressure. . . .

NOTICES

POSTGRADUATE PROGRAMS FOR MASTER OF PUBLIC HEALTH

The Division of Maternal and Child Health of the University of California School of Public Health at Berkeley announces postgraduate programs leading to the degree of Master of Public Health. These programs are for pediatricians, obstetricians, and other physicians interested in receiving training in the field of Maternal and Child Health. Fellowship support is available, including basic support for the trainee, an allowance for dependents, tuition and fees.

Applications are now being accepted for the group entering September, 1971. For information and program areas now available, write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.

ANNOUNCEMENT OF TUMOR REGISTRY TRAINING PROGRAM SCHEDULE

PLACE: University of California, San Francisco, General Tumor Registry, Cancer Research Institute.

SUPPORT: This program is supported under a contract from the Division of Regional Medical Programs, Washington, D.C., of the United States Public Health Service.

WHO: Applications are welcome from all persons employed in Tumor Registry work or related fields.

WHEN:

CURRENTLY SCHEDULED PROGRAMS*	DEADLINE FOR APPLICATIONS
February 1-12, 1971	January 1, 1971
April 5-30, 1971	March 1, 1971
August 2-13, 1971	July 1, 1971
November 1-23, 1971	October 1, 1971
February 7-18, 1972	January 1, 1972
April 3-28, 1972	March 1, 1972

* Dates of future programs are subject to change.

For applications or further information write to: Calvin Zippin, Sc.D., General Tumor Registry, Cancer Research Institute, University of California, San Francisco, San Francisco, California 94122.

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EMPHYSEMA CLUB ESTABLISHED

The Hawaii Tuberculosis & Respiratory Disease Association has begun a new activity aimed at helping those people suffering from emphysema. An Emphysema Club has been established to provide an educational and informational program for all people with the condition.

While providing an opportunity for social interaction among persons with similar problems, the club's activities will offer benefits not only to the patient, but also to his family.

No individual medical diagnosis, treatment, or therapy will be recommended or practiced. Participants are encouraged at all times to remain under the medical supervision of their own physicians. Philip W. Foti, M.D., Chairman of the Respiratory Disease Committee of the Hawaii Thoracic Society, will serve as medical advisor to the group. Don Ford, Director of the Respiratory Disease Program of the TB-RD Association, will direct the club activities. Further information about the Emphysema Club can be obtained by calling Mr. Ford at 537-5966. Physician inquiries are welcomed.

Slants and Angles continued from 644

an authority figure when all other sources seem to be nonfunctioning. It is not always possible to decipher why a trivial call was made at an inopportune time but if the physician is used to thinking in terms of the motivation behind the call, understanding will usually be forthcoming. Frequent trivial calls from a particular mother may indicate a basic neurosis or marital conflict. Basically, disturbed parent-child relationships may exist undercover in smooth periods but may provoke panic and overt guilt at times of even minor illness." "If an effective physician-telephone symbiosis is to exist, it must function at a level higher than just communication of words and facts and must aim towards the level of communicating feelings with care, understanding and knowledge." ■

W. PHILIP JONES, M.D.

Cooper Hospital Quiz

Cooper Hospital Quiz answers to questions appearing on page 627, from *Amer J Med* (May) 1970.

(1) FALSE

"The anemia described by Addison of Guy's in 1855 was defined by him only by exclusion of other recognized causes as 'idiopathic' and as 'having uniformly occurred in fat people.' Thus, none of the triad of clinical features that today would allow a presumptive diagnosis of vitamin B₁₂ deficiency—glossitis, jaundice and especially neural symptoms—was mentioned by him. Consequently, recognition must depend on the views of contemporary physicians. Indeed, only five years later, in 1860, Austin Flint in this country stated his suspicion that in 'cases such as Addison refers to' although 'not rendered distinctly apparent to the naked eye . . . there exists degenerative disease of the glandular tubuli of the stomach.'"

(2) (c)

"If pernicious anemia is defined as vitamin B₁₂ deficiency induced by lack of the gastric intrinsic factor, the same end result may follow total gastrectomy, although usually not before five years have elapsed and more gradually after partial gastrectomy. Vitamin B₁₂ deficiency is more likely to follow a similar amount (60 per cent) of gastric resection for peptic ulcer of the stomach than for duodenal ulcer, probably as a consequence of the greater prevalence of gastritis in association with the former condition. Ingestion of corrosives may also destroy the secretory capacity of the stomach, and in some instances extensive scirrhous carcinoma may do likewise although the cancer may instead have evolved from a previous underlying gastritis, as eventually occurs in perhaps up to 10 per cent of the patients with well established and treated pernicious anemia."

(3) FALSE

"A genetic background for adult-type pernicious anemia has long been recognized as expressed by a greater incidence of the disease in blood relatives than in the normal population. Likewise in such relatives there is an even greater incidence than in the general population of the same age, of achlorhydria, gastritis and diminished ability to absorb oral test doses of radioactive vitamin B₁₂.

(4) (d)

"The 'idiopathic' anemia described by Addison and later called 'pernicious' is the result of a particular immediate cause of vitamin B₁₂ deficiency, namely, lack of the so-called intrinsic factor of the normal human gastric secretion. In the normal stomach this insignificant glycoprotein is secreted by the parietal cells and avidly binds

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to itself the small amounts of vitamin B₁₂ found in most foods of animal origin and released during peptic digestion. Once so bound, the vitamin is then conveyed to the distal ileum where the intrinsic factor-vitamin B₁₂ complex is specifically absorbed to the microvilli of the intestinal cell, whereas the vitamin is released to the cell interior and subsequently reaches the blood stream."

(5) TRUE

"The pathogenesis of the neurologic lesions in vitamin B₁₂ deficiency remains obscure. Neither of the reactions known to occur in man has been shown to bear a direct relationship to the observed pathology."

(6) FALSE

"Although there is a close relationship between vitamin B₁₂ and folic acid in hemopoiesis, as suggested by the fact that the macrocytic megaloblastic anemia of folate deficiency is hematologically indistinguishable from that of pure cobalamin deficiency, a precise definition of the nature of this relationship is still lacking. Elucidation of this relationship promises to be as complex as that of the isolation and identification of the two vitamins."

(7) TRUE

"Vitamin B₁₂ is a unique vitamin in that it is synthesized almost exclusively by microorganisms. Wherever it occurs in nature, its origin can be traced to bacteria or other microorganisms growing in soil or water, or in the rumen or intestines of animals. Thus the sole dietary sources of the vitamin are microorganisms and the living creatures which ingest them."

(8) TRUE

"It has been estimated that most diets contain from 50 to 100 µg per gm wet weight. Clams, crabs and oysters scavenge large quantities of microorganisms from the surrounding water and therefore have large concentrations of vitamins B₁₂. In food sources, vitamin B₁₂ is complexed via peptide bonds to protein. When the food is processed by cooking and eating, the vitamin is released from these bonds by heat and by gastric acid and gastric and intestinal enzymes."

(9) TRUE

"Prerequisites for the active, physiologic absorption of vitamin B₁₂ are adequate intrinsic factor (IF) secretion (and therefore gastric parietal cell function), normal ileal mucosal receptor sites and optimal intraluminal conditions for the attachment of the IF—B₁₂ complex to its receptor site.

"Conditions that affect the structure and/or function of the gastric parietal cells and/or ileal receptor sites may therefore result in vitamin B₁₂ malabsorption. Similarly, clinical states in which the intraluminal ileal pH and ionic milieu are affected may result in malabsorption of vitamin B₁₂. Intraluminal agents such as bacteria or parasites, by competing with the host for dietary vitamin B₁₂, constitute another cause of vitamin B₁₂ deficiency."

(10) FALSE

"A deficiency of folic acid may arise by a number of well studied mechanisms which include inadequate dietary intake, defective absorption as part of a generalized malabsorption syndrome, increased requirements or the presence of folic acid antagonists. Folic acid deficiency arising as a result of a congenital isolated defect in folic acid absorption has only rarely been recorded."

(11) TRUE

"Several patients with an inborn error of folic acid metabolism have been described since 1961. It is worthy of note that mental retardation developed in those with a congenital defect in folic acid utilization, whereas only sleeplessness and irritability developed in those with adult-onset folate deficiency."

(12) TRUE

"Defective DNA synthesis, producing megaloblastosis, most frequently arises from deficiencies of vitamin B₁₂ or folic acid. Such vitamin deficiency may result from inadequate ingestion, absorption or utilization, or from increased requirement or excretion." ■

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Economic Opportunity Staff nurse, and Mrs. Cornelius Mulder, Executive Director for Hawaii Planned Parenthood Association. Mrs. Mulder speaking for the group outlined the need for organized family planning on the Big Island. She hopes for suggestion and support from the island physicians. Tentatively family planning clinics are proposed for the so-called deprived areas of Kona, Pahala and Honokaa. Mr. T. Leuteneker, vice president of the Hawaii County Bar Association, asked for a discussion regarding the Interprofessional Code. The discussion revolved mainly around the topic of malpractice and the exchange of medical information between physician and attorney. A film depicting examination and cross examination of a physician in the courtroom was shown. It was agreed that another meeting between the Bar Association and the Medical Society should take place in approximately two months. This meeting will be used to discuss malpractice exclusively. In order that the meeting may be more rewarding a pilot group of physicians and attorneys will meet earlier to establish guidelines of the discussion. After mutual problems were discussed the attorneys left.

Dr. Bracher announced that the proposed Fee Schedule for Workmen's Compensation will be available for review in his office at the hospital. Dr. Bracher read letters of appreciation and showed a hand-painted plaque which was given to the Hawaii County Medical Society by the research physicians from Hiroshima, Japan.

Honolulu

Approximately 100 members and guests were present at the September 1 meeting when the following new members were introduced: Drs. Danelo R. Canete, Melvin H. Levin, Ching Kong Lu, Thomas Maeda, Jr., and Yoshio Oda.

Dr. Robert D. Millard was called upon to pay tribute to a member of the society, Dr. Philip T. Chu, who died on July 17, 1970. A moment of silence was observed.

Mr. Thorson was asked to report on the malpractice insurance renewal problems which have come up. He informed the membership that a postcard survey was done and that the results of that survey are inconclusive at this time.

Mr. Thorson also reported on the recent meeting with Mr. Robert Hasegawa, Director of the Department of Labor, regarding proposed changes in the Workmen's Compensation Law. He informed the membership that a hearing will be held on September 21, 1970, 9:00 A.M., in the State Capitol Auditorium, and urged that members attend the hearing.

Dr. Omura announced that effective September 1, 1970, the Preventive and Clinical Services Branch, Mental Health Division of the Department of Health, will initiate new Psychiatric Emergency Services on Oahu. The new Emergency Service will be coordinated and tied in with the new Suicide and Crisis Intervention Service of the Health and Community Services Council of Hawaii.

Drs. Fred I. Gilbert and John R. Watson presented the program, "The Extended Role of RN's and the New Role for Allied Medical Personnel in Health Services." Six individuals representing various allied health professions presented a description of their roles in allied health services. A question and answer session followed their presentation.

Maui

Members present at the September 15 meeting included: Drs. Sowers, Romero, Moran, Morris, Underwood, Pfaeltzer, Achong, Iaconetti, Uehara, Fu, McCollum, Dietrich, LaFon, Percy, Allred, Tofukuji, Burden and Wong.

One new member, Dr. John Briley, was accepted into the society.

The Family Planning Clinic plan was then discussed by Dr. Allred and Dr. Uehara. Dr. Iaconetti moved that the patients be referred to the private medical doctors for family planning techniques instead of accepting the proposal of such a clinic. The motion was passed. Dr. Pfaeltzer then introduced Dr. William Kepler to the Medical Society. A general outline of the prepaid medical plan to be offered on the Maui County Medical Society basis was then circulated by Dr. Uehara. It was felt to be competitive with Plans I and II of Kaiser or Plan IV of HMSA and that this plan would involve the Maui physicians and still yet offer a free choice of physicians. The offers by medical insurance carriers was noted. A definite decision regarding this matter will be considered in the next meeting.

Dr. A. Y. Wong then presented the summary of the two previous Diabetic Screening programs and it was noted that Drs. Wong, Uehara, Sowers, and Percy would continue to be on this committee with Dr. Percy as co-chairman.

The Workmen's Compensation hearing which was to be held September 21, 1970 was reported to be postponed.

Through the HMA Council meeting to be held this Friday, Dr. Iaconetti is to request for further clarification on a previous HMA Council meeting regarding prepayment principles as outlined in the previous meeting.

Dr. Sowers then presented a public cardioscreening analyzer offered by the Hawaii Heart Association to be presented at the next Maui County Fair. It was approved to offer this cardioscreening technique.

Further investigation was approved regarding the request that the Utilization Committee of the Medical Society pay for their breakfast charges.

Kauai

Attending the October 6 meeting were Doctors: R. Berry, P. Claremont, K. Chuang, P. Cockett, G. Geroso, A. Johnston, P. Kim, W. McLaughlin, E. Rames, C. Rea, J. Takeuchi, B. Wade and S. Wallis. Guests present were Doctors: P. Curd and T. Grollman.

The slate of officers for the year 1971 was presented as follows:

President: Dr. C. Custer
Vice President: Dr. K. Chuang
Secretary Treasurer: Dr. R. Berry
Delegate: Dr. P. Cockett
Alternate Delegate: Dr. W. McLaughlin
Counselor for Kauai: Dr. Peter Kim
Regional Medical Program Advisor: Dr. E. Rames

It was moved and seconded that the nominations be accepted and this will be voted on at the next county society meeting.

Dr. Geroso announced to the members that there will be a pulmonary function test seminar to be held at San Diego sometime in 1971 and those who are interested in going can take a look at the program that is offered.

Dr. Geroso then advised the members that Dr. Hoffman who is now living in the Hanalei area is interested in setting up a practice in the Hanalei region and that the only way that he will be able to do so will be either under the sponsorship of another physician, or that the County Society could declare the Hanalei region a physician-deprived area and he would then be able to practice medicine at that time. It was moved and seconded that this be discussed with Dr. Clyde Ishii who is practicing out in the Kilauea region to find out his feelings about the idea and this will be discussed with the Executive committee of the Kauai County Medical Society and brought up at the meeting in December.

The pledge cards for the Kauai United Fund for 1971 will be distributed to the members for them to fill in and to send their contribution directly to the Kauai United Fund.

Dr. Peter Kim then notified the members that Dr. Fred Ansfield who is an expert in the field of cancer therapy will be available for discussion or lectures on Monday, November 9th and Tuesday, November 10th. He probably will be scheduled to speak at the G. N. Wilcox Hospital staff meeting on Tuesday, November 10th. Physicians and nurses on Kauai are invited to come and listen to him.

The diabetic survey will be conducted the last week of this month throughout the island of Kauai and Dr. Miyahara who is very interested in the diabetic program, will be available to speak to the membership on diabetes. It was recommended that he be invited to come and talk to the membership sometime in the third week of November. Further details of this will be forthcoming from Dr. Peter Kim when arrangements have been made.

Dr. Albert Johnston brought up for discussion, the problems that the Utilization Review committee at Wilcox Hospital are encountering with the Medicare Program. Discussed were the question of adequate utilization of hospital beds by Medicare patients, the extent of hospital stay when Medicare decided that it is not up to the level of care that had been proposed by them, even though the Utilization Review committee recommended the extension of stay justified.

The dues structure for the Medical Society for 1971 will be as follows:

Hawaii Medical Association.....	\$140.00
American Medical Association.....	110.00
Hawaii Medical Journal.....	6.00
Kauai County Medical Society.....	20.00
	<hr/>
	\$276.00 ■

Inside HMA *continued from 649*

legislature definitely will take action during the next session on a bill to legalize physicians' assistants although the details are still very much unknown.

Subcommittee of the Cancer Committee is doing some good work on the question of developing an oncology program for the State. After discussing the question of a single oncology unit for the State at the Convalescent Center or elsewhere, it was concluded that the best approach would be to develop an oncology unit at each of the major hospitals in Honolulu and plan to bring visiting professors to give oncology lectures.

The Bureau of Research and Planning, our "think-tank," is continuing evaluation of medical care, particularly in your offices, the four year medical school, ways of reducing the cost of medical care, the need for immediate and long-term care facilities, promotion of medical education for the lay public, and is taking a good look at HMA itself from an outside point of view. Specifically, what is being done to encourage young physicians to participate in the affairs of HMA, to ease the load of the older physicians who are carrying the load? What should be done about health care for "hippies" and other transients? This Bureau is obviously doing some hard thinking and I predict that good things will come from it. ■

JOHN BROWN, M.D.

Hawaii Academy of General Practice . . . *continued from 645*

The profession seriously needs to come to grips with what now is a matter of concern not only for us and our immediate patients, but what has the Congress and the entire body politic stirred up. We need to put a curb on our previous complete freedom to set our own fees. We must admit this has gotten out of hand, primarily because we are in short supply—because this a seller's market, as they say.

We need to get back to a reasonable and proper single conversion factor applicable to all on the basis of an RVS that has recently been updated and revised (and is about to come out of committee!)

If we physicians accept an RVS and fixed factor that can be reasonably moulded with changing times, WCB can hardly do anything *but* go along! Unless we adopt such a concept, we shall forever be at sticks and stones with HMSA, DSS, the VA, the BCC and all the rest of the third parties which we simply must accept as being here to stay. ■

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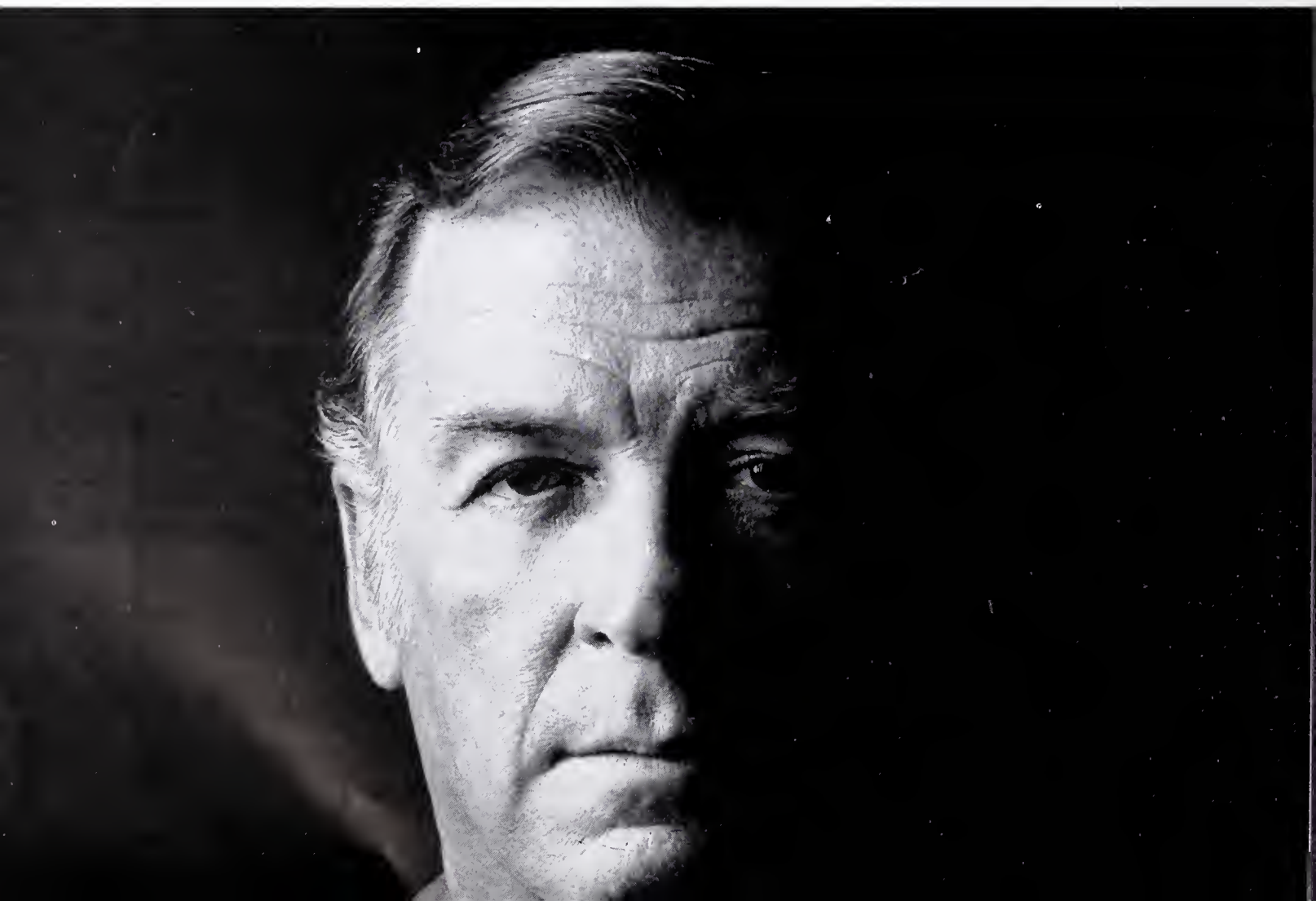


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In nursing mothers: If the nursing newborn of a MYSOLINE-treated mother appears unduly drowsy, nursing should be discontinued since substantial quantities of the drug may appear in the milk.

Use in pregnancy: Many patients have taken antiepileptic drugs, including MYSOLINE, during the entire course of their pregnancies without apparent adverse effect on the offspring. Nevertheless, the benefit of the administration of any drug during pregnancy must be weighed against any possible effect on the fetus.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. On rare occasion, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE (primidone) and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinuing medication.

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Average Dosage Schedule—250 mg. Tablet		
Week	Adults and children over 8 years	Children under 8 years
1	250 mg. h.s.	125 mg. h.s.
2	250 mg. b.i.d. (morning and evening)	125 mg. b.i.d. (morning and evening)
3	250 mg. t.i.d.	125 mg. t.i.d.
4	250 mg. q.i.d.	125 mg. q.i.d.

If necessary, continue similar weekly increments to tolerance, or therapeutic effectiveness, up to daily doses not exceeding 2.0 Gm. **IN PATIENTS ALREADY RECEIVING OTHER ANTICONVULSANTS:** MYSOLINE should be gradually increased as dosage of the other drug(s) is maintained or gradually decreased. This regimen should be continued until satisfactory dosage level is achieved for combination, or the other medication is completely withdrawn. When therapy with this product alone is the objective, the transition should not be completed in less than two weeks.

MYSOLINE (primidone) 50 mg. TABLET can be used to practical advantage when small fractional adjustments (upward or downward) may be required as in certain cases, for initiation of combination therapy and during "transfer" therapy. Also as added protection in periods of stress or stressful situations likely to precipitate seizures (menstruation, allergic episodes, holidays, etc.).

SUPPLIED:

MYSOLINE Tablets—No. 430—Each tablet contains 0.25 Gm. (250 mg.) of primidone (scored), in bottles of 100 and 1,000. No. 431—Each tablet contains 50 mg. of primidone (scored), in bottles of 100 and 500.

MYSOLINE Suspension—No. 3850—Each 5 cc. (1 teaspoonful) contains 0.25 Gm. (250 mg.) of primidone, in bottles of 8 fluidounces.

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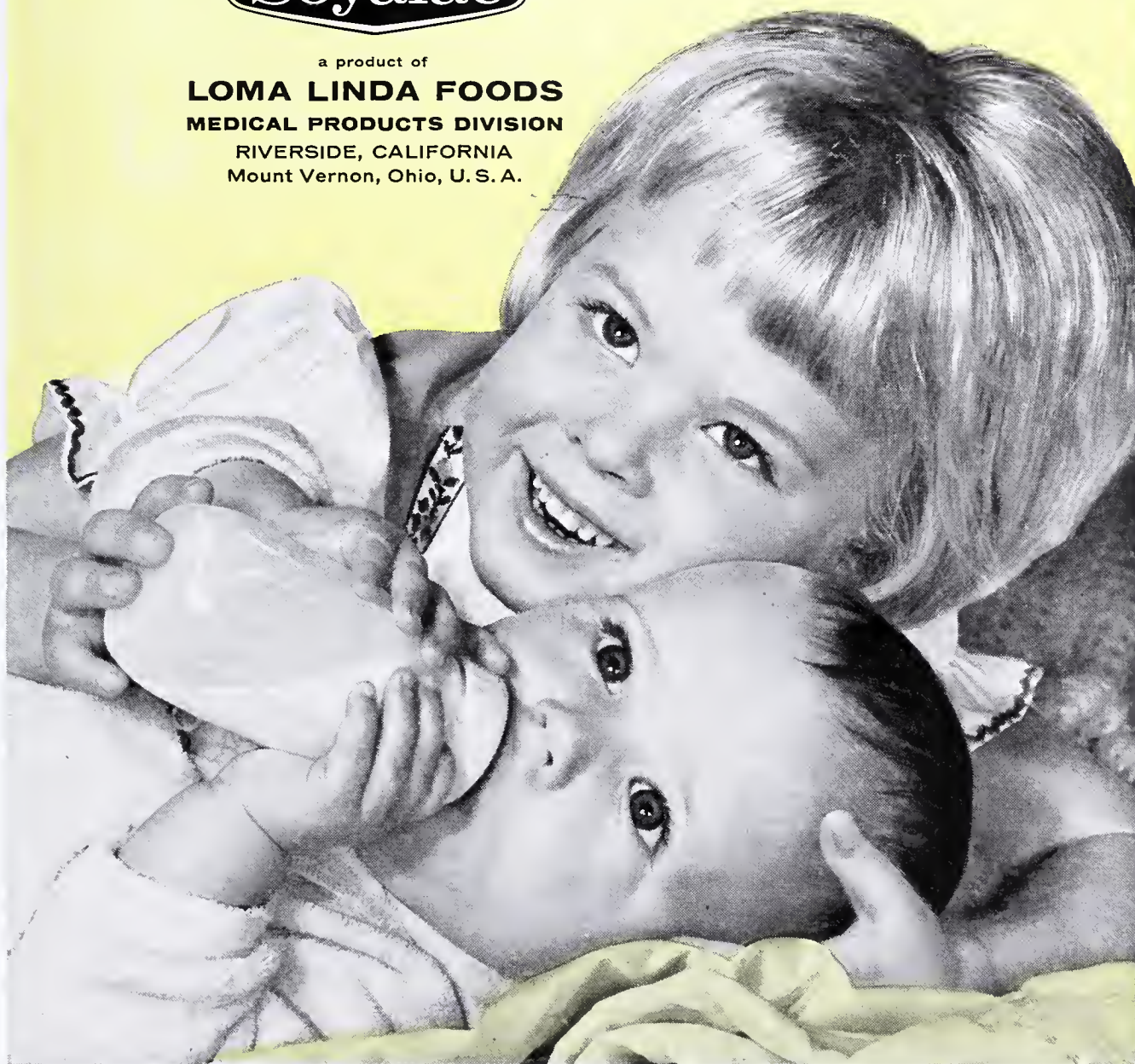
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Actions—Demulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Demulen depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision. Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain^{1,3} leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated

after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions; neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. 13: 267-279 (May) 1967. 2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. 3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. 4. Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidemiol. 90:365-380 (Nov.) 1969.

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possibility of increase in frequency
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may require increased dosage of
standard anticonvulsant medication;
abrupt withdrawal may be associated
with temporary increase in frequency
and/or severity of seizures. Advise
against simultaneous ingestion of
alcohol and other CNS depressants.
Withdrawal symptoms have occurred
following abrupt discontinuance.
Keep addiction-prone individuals
under careful surveillance because of
their predisposition to habituation
and dependence. In pregnancy, lac-
tation or women of childbearing age,
weigh potential benefit against pos-
sible hazard.

Precautions: If combined with other
psychotropics or anticonvulsants,
consider carefully pharmacology of
agents employed. Usual precautions
indicated in patients severely de-
pressed, or with latent depression,
or with suicidal tendencies. Observe
usual precautions in impaired renal
or hepatic function. Limit dosage to

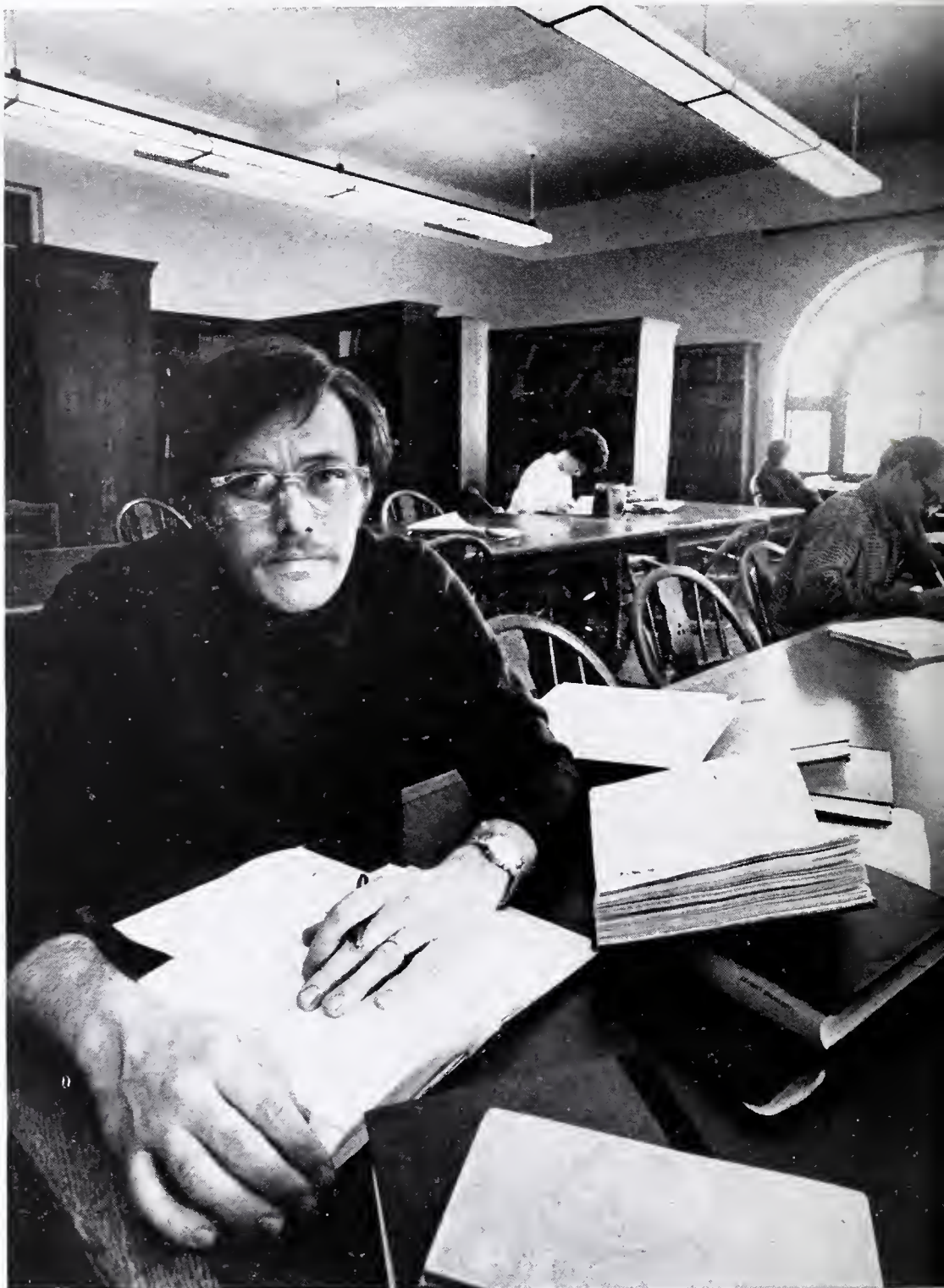
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Paradoxical reactions such as acute
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nations, increased muscle spasticity,
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